

# FIGURE 3

## LEGEND

Column headings from left to right are (A)'Atom Number', (B)'Atom Type', (C)'Amino Acid', (D)'Chain Identifier', (E)'Amino Acid Number' (reference to SEQ ID NO: 3), (F)'X Coordinate', (G)'Y Coordinate', (H)'Z Coordinate', (I)'Occupancy' (OCC) and (J)'B factor'.

A	B	C	D	E	F	G	H	I	J
1	N	ARG	A	14	-78.499	25.732	64.898	1.00	51.08
2	CA	ARG	A	14	-77.682	24.936	63.934	1.00	50.91
3	CB	ARG	A	14	-76.853	25.895	63.064	1.00	51.59
4	CG	ARG	A	14	-76.507	25.382	61.666	1.00	54.33
5	CD	ARG	A	14	-76.170	26.503	60.678	1.00	58.00
6	NE	ARG	A	14	-76.489	26.159	59.292	1.00	61.47
7	CZ	ARG	A	14	-76.158	26.909	58.245	1.00	62.24
8	NH1	ARG	A	14	-75.492	28.043	58.429	1.00	61.77
9	NH2	ARG	A	14	-76.486	26.525	57.016	1.00	62.51
10	C	ARG	A	14	-76.763	23.943	64.655	1.00	49.68
11	O	ARG	A	14	-75.871	23.360	64.038	1.00	49.98
12	N	LYS	A	15	-76.986	23.740	65.952	1.00	47.84
13	CA	LYS	A	15	-76.091	22.892	66.731	1.00	46.49
14	CB	LYS	A	15	-75.983	23.350	68.181	1.00	46.98
15	CG	LYS	A	15	-77.288	23.731	68.859	1.00	49.99
16	CD	LYS	A	15	-77.002	24.390	70.224	1.00	53.43
17	CE	LYS	A	15	-78.085	25.406	70.605	1.00	55.57
18	NZ	LYS	A	15	-77.642	26.378	71.671	1.00	57.35
19	C	LYS	A	15	-76.358	21.398	66.670	1.00	44.72
20	O	LYS	A	15	-77.487	20.943	66.476	1.00	44.71
21	N	THR	A	16	-75.279	20.641	66.812	1.00	42.33
22	CA	THR	A	16	-75.363	19.201	66.815	1.00	39.34
23	CB	THR	A	16	-74.225	18.582	66.009	1.00	39.46
24	OG1	THR	A	16	-72.972	18.975	66.565	1.00	38.25
25	CG2	THR	A	16	-74.187	19.163	64.603	1.00	38.11
26	C	THR	A	16	-75.295	18.761	68.251	1.00	37.67
27	O	THR	A	16	-75.098	19.578	69.150	1.00	37.00
28	N	TYR	A	17	-75.534	17.476	68.466	1.00	35.46
29	CA	TYR	A	17	-75.439	16.896	69.785	1.00	33.88
30	CB	TYR	A	17	-76.340	15.666	69.865	1.00	33.82
31	CG	TYR	A	17	-76.311	14.944	71.179	1.00	32.28
32	CD1	TYR	A	17	-77.203	15.265	72.191	1.00	32.55
33	CE1	TYR	A	17	-77.170	14.603	73.411	1.00	32.32
34	CZ	TYR	A	17	-76.248	13.588	73.600	1.00	31.27
35	OH	TYR	A	17	-76.199	12.905	74.782	1.00	29.92
36	CE2	TYR	A	17	-75.366	13.257	72.606	1.00	30.87
37	CD2	TYR	A	17	-75.395	13.936	71.406	1.00	30.90
38	C	TYR	A	17	-73.971	16.526	69.924	1.00	32.90
39	O	TYR	A	17	-73.501	15.626	69.247	1.00	32.98
40	N	THR	A	18	-73.247	17.244	70.776	1.00	31.58
41	CA	THR	A	18	-71.792	17.060	70.901	1.00	30.40

FIGURE 3A

A	B	C	D	E	F	G	H	I	J
42	CB	THR	A	18	-71.126	18.369	71.311	1.00	29.92
43	OG1	THR	A	18	-71.551	18.690	72.644	1.00	29.95
44	CG2	THR	A	18	-71.606	19.526	70.444	1.00	30.35
45	C	THR	A	18	-71.353	16.053	71.937	1.00	29.51
46	O	THR	A	18	-72.131	15.625	72.782	1.00	28.96
47	N	LEU	A	19	-70.064	15.739	71.895	1.00	29.18
48	CA	LEU	A	19	-69.454	14.841	72.858	1.00	29.40
49	CB	LEU	A	19	-67.958	14.681	72.570	1.00	29.30
50	CG	LEU	A	19	-67.186	13.725	73.475	1.00	29.28
51	CD1	LEU	A	19	-67.668	12.278	73.289	1.00	26.89
52	CD2	LEU	A	19	-65.706	13.844	73.171	1.00	29.54
53	C	LEU	A	19	-69.668	15.422	74.247	1.00	29.40
54	O	LEU	A	19	-70.014	14.702	75.174	1.00	29.52
55	N	THR	A	20	-69.483	16.731	74.375	1.00	29.38
56	CA	THR	A	20	-69.674	17.419	75.650	1.00	29.71
57	CB	THR	A	20	-69.270	18.921	75.530	1.00	30.55
58	OG1	THR	A	20	-67.858	19.022	75.275	1.00	31.86
59	CG2	THR	A	20	-69.426	19.646	76.871	1.00	29.63
60	C	THR	A	20	-71.095	17.286	76.152	1.00	29.39
61	O	THR	A	20	-71.311	17.062	77.336	1.00	29.75
62	N	ASP	A	21	-72.070	17.413	75.255	1.00	29.23
63	CA	ASP	A	21	-73.467	17.237	75.640	1.00	28.50
64	CB	ASP	A	21	-74.381	17.347	74.420	1.00	28.92
65	CG	ASP	A	21	-74.390	18.740	73.824	1.00	30.30
66	OD1	ASP	A	21	-74.348	19.699	74.612	1.00	30.33
67	OD2	ASP	A	21	-74.419	18.969	72.588	1.00	31.62
68	C	ASP	A	21	-73.635	15.871	76.288	1.00	28.19
69	O	ASP	A	21	-74.255	15.737	77.363	1.00	27.07
70	N	TYR	A	22	-73.067	14.854	75.635	1.00	28.18
71	CA	TYR	A	22	-73.110	13.498	76.162	1.00	28.06
72	CB	TYR	A	22	-72.478	12.503	75.180	1.00	28.13
73	CG	TYR	A	22	-72.316	11.105	75.757	1.00	28.21
74	CD1	TYR	A	22	-73.381	10.473	76.387	1.00	27.52
75	CE1	TYR	A	22	-73.231	9.225	76.941	1.00	31.17
76	CZ	TYR	A	22	-71.994	8.574	76.850	1.00	31.00
77	OH	TYR	A	22	-71.855	7.320	77.396	1.00	33.09
78	CE2	TYR	A	22	-70.920	9.184	76.231	1.00	27.37
79	CD2	TYR	A	22	-71.086	10.444	75.703	1.00	27.39
80	C	TYR	A	22	-72.400	13.430	77.507	1.00	28.37
81	O	TYR	A	22	-72.966	12.974	78.504	1.00	28.20
82	N	LEU	A	23	-71.160	13.894	77.544	1.00	29.10
83	CA	LEU	A	23	-70.363	13.783	78.766	1.00	29.84
84	CB	LEU	A	23	-68.895	14.060	78.490	1.00	29.67
85	CG	LEU	A	23	-68.233	13.147	77.454	1.00	30.09
86	CD1	LEU	A	23	-66.745	13.421	77.442	1.00	27.93
87	CD2	LEU	A	23	-68.502	11.647	77.730	1.00	29.29
88	C	LEU	A	23	-70.846	14.639	79.919	1.00	30.85
89	O	LEU	A	23	-70.704	14.254	81.081	1.00	31.02
90	N	LYS	A	24	-71.417	15.798	79.613	1.00	31.74
91	CA	LYS	A	24	-71.909	16.658	80.669	1.00	33.11
92	CB	LYS	A	24	-71.501	18.129	80.433	1.00	33.11

FIGURE 3B

A	B	C	D	E	F	G	H	I	J
93	CG	LYS	A	24	-69.997	18.373	80.362	1.00	31.71
94	CD	LYS	A	24	-69.297	17.906	81.648	1.00	32.14
95	CE	LYS	A	24	-67.820	18.355	81.702	1.00	32.14
96	NZ	LYS	A	24	-67.002	17.666	82.769	1.00	29.53
97	C	LYS	A	24	-73.426	16.521	80.864	1.00	34.49
98	O	LYS	A	24	-73.998	17.135	81.752	1.00	34.44
99	N	ASN	A	25	-74.082	15.701	80.048	1.00	36.12
100	CA	ASN	A	25	-75.517	15.506	80.214	1.00	37.50
101	CB	ASN	A	25	-75.813	14.898	81.583	1.00	38.04
102	CG	ASN	A	25	-75.397	13.437	81.686	1.00	42.36
103	OD1	ASN	A	25	-75.195	12.919	82.793	1.00	46.50
104	ND2	ASN	A	25	-75.285	12.753	80.534	1.00	46.18
105	C	ASN	A	25	-76.312	16.808	80.032	1.00	37.71
106	O	ASN	A	25	-77.122	17.187	80.870	1.00	37.63
107	N	THR	A	26	-76.066	17.493	78.926	1.00	38.29
108	CA	THR	A	26	-76.761	18.725	78.622	1.00	38.88
109	CB	THR	A	26	-76.259	19.227	77.281	1.00	39.01
110	OG1	THR	A	26	-74.854	19.444	77.377	1.00	39.58
111	CG2	THR	A	26	-76.817	20.607	76.955	1.00	39.02
112	C	THR	A	26	-78.271	18.476	78.551	1.00	39.19
113	O	THR	A	26	-79.066	19.157	79.198	1.00	39.04
114	N	TYR	A	27	-78.637	17.482	77.754	1.00	39.58
115	CA	TYR	A	27	-80.017	17.110	77.518	1.00	39.93
116	CB	TYR	A	27	-80.169	16.771	76.044	1.00	39.52
117	CG	TYR	A	27	-79.698	17.921	75.211	1.00	38.77
118	CD1	TYR	A	27	-80.438	19.087	75.151	1.00	39.35
119	CE1	TYR	A	27	-80.006	20.166	74.431	1.00	39.27
120	CZ	TYR	A	27	-78.817	20.093	73.765	1.00	38.78
121	OH	TYR	A	27	-78.400	21.180	73.049	1.00	38.94
122	CE2	TYR	A	27	-78.051	18.947	73.817	1.00	38.83
123	CD2	TYR	A	27	-78.488	17.878	74.549	1.00	38.20
124	C	TYR	A	27	-80.398	15.926	78.368	1.00	40.73
125	O	TYR	A	27	-80.207	14.793	77.969	1.00	41.03
126	N	ARG	A	28	-80.940	16.177	79.546	1.00	42.07
127	CA	ARG	A	28	-81.271	15.065	80.420	1.00	43.55
128	CB	ARG	A	28	-81.423	15.521	81.873	1.00	44.02
129	CG	ARG	A	28	-80.996	14.454	82.878	1.00	47.22
130	CD	ARG	A	28	-81.354	14.734	84.340	1.00	51.56
131	NE	ARG	A	28	-82.668	14.202	84.699	1.00	55.65
132	CZ	ARG	A	28	-83.559	14.845	85.448	1.00	57.92
133	NH1	ARG	A	28	-83.291	16.050	85.930	1.00	58.60
134	NH2	ARG	A	28	-84.725	14.279	85.715	1.00	60.08
135	C	ARG	A	28	-82.534	14.355	79.951	1.00	43.77
136	O	ARG	A	28	-83.352	14.918	79.221	1.00	44.23
137	N	LEU	A	29	-82.669	13.097	80.338	1.00	43.66
138	CA	LEU	A	29	-83.883	12.376	80.054	1.00	43.77
139	CB	LEU	A	29	-83.602	10.950	79.602	1.00	43.85
140	CG	LEU	A	29	-83.293	10.758	78.121	1.00	44.26
141	CD1	LEU	A	29	-82.836	9.324	77.850	1.00	45.40
142	CD2	LEU	A	29	-84.505	11.088	77.282	1.00	45.47
143	C	LEU	A	29	-84.578	12.376	81.381	1.00	43.80

FIGURE 3C

A	B	C	D	E	F	G	H	I	J
144	O	LEU	A	29	-83.983	12.028	82.397	1.00	43.27
145	N	LYS	A	30	-85.831	12.804	81.393	1.00	43.83
146	CA	LYS	A	30	-86.540	12.864	82.653	1.00	44.19
147	CB	LYS	A	30	-87.558	13.999	82.623	1.00	44.45
148	CG	LYS	A	30	-87.589	14.791	83.904	1.00	45.86
149	CD	LYS	A	30	-87.585	16.278	83.631	1.00	48.33
150	CE	LYS	A	30	-87.850	17.057	84.915	1.00	50.36
151	NZ	LYS	A	30	-87.184	16.414	86.093	1.00	50.63
152	C	LYS	A	30	-87.188	11.530	82.992	1.00	43.80
153	O	LYS	A	30	-87.671	10.828	82.119	1.00	43.69
154	N	LEU	A	31	-87.176	11.182	84.269	1.00	43.81
155	CA	LEU	A	31	-87.756	9.930	84.734	1.00	43.79
156	CB	LEU	A	31	-86.736	9.163	85.574	1.00	43.75
157	CG	LEU	A	31	-85.603	8.328	84.969	1.00	44.56
158	CD1	LEU	A	31	-84.873	9.055	83.846	1.00	43.44
159	CD2	LEU	A	31	-84.628	7.930	86.096	1.00	44.48
160	C	LEU	A	31	-88.977	10.156	85.617	1.00	43.68
161	O	LEU	A	31	-89.333	11.277	85.963	1.00	43.78
162	N	TYR	A	32	-89.615	9.065	85.996	1.00	43.53
163	CA	TYR	A	32	-90.674	9.138	86.968	1.00	43.23
164	CB	TYR	A	32	-92.052	9.303	86.338	1.00	43.05
165	CG	TYR	A	32	-93.048	9.809	87.349	1.00	42.24
166	CD1	TYR	A	32	-93.511	8.981	88.365	1.00	40.80
167	CE1	TYR	A	32	-94.404	9.431	89.295	1.00	40.31
168	CZ	TYR	A	32	-94.844	10.741	89.243	1.00	41.67
169	OH	TYR	A	32	-95.739	11.185	90.191	1.00	43.57
170	CE2	TYR	A	32	-94.393	11.593	88.260	1.00	41.02
171	CD2	TYR	A	32	-93.490	11.127	87.321	1.00	41.49
172	C	TYR	A	32	-90.607	7.874	87.767	1.00	43.22
173	O	TYR	A	32	-91.398	6.966	87.573	1.00	43.16
174	N	SER	A	33	-89.646	7.823	88.671	1.00	43.72
175	CA	SER	A	33	-89.442	6.642	89.486	1.00	44.29
176	CB	SER	A	33	-87.971	6.494	89.860	1.00	44.28
177	OG	SER	A	33	-87.829	5.415	90.769	1.00	45.94
178	C	SER	A	33	-90.255	6.707	90.749	1.00	44.40
179	O	SER	A	33	-90.016	7.558	91.591	1.00	44.77
180	N	LEU	A	34	-91.195	5.782	90.895	1.00	44.57
181	CA	LEU	A	34	-92.057	5.761	92.058	1.00	44.62
182	CB	LEU	A	34	-93.520	5.959	91.626	1.00	44.14
183	CG	LEU	A	34	-94.125	4.942	90.643	1.00	43.66
184	CD1	LEU	A	34	-94.404	3.595	91.314	1.00	40.76
185	CD2	LEU	A	34	-95.392	5.481	89.957	1.00	41.85
186	C	LEU	A	34	-91.893	4.444	92.788	1.00	45.36
187	O	LEU	A	34	-91.354	3.490	92.236	1.00	45.44
188	N	ARG	A	35	-92.332	4.398	94.038	1.00	46.33
189	CA	ARG	A	35	-92.342	3.152	94.780	1.00	48.23
190	CB	ARG	A	35	-91.397	3.171	95.983	1.00	48.19
191	CG	ARG	A	35	-90.088	3.873	95.758	1.00	50.55
192	CD	ARG	A	35	-89.158	3.812	96.952	1.00	52.14
193	NE	ARG	A	35	-87.815	4.235	96.585	1.00	54.13
194	CZ	ARG	A	35	-86.755	4.134	97.378	1.00	53.95



FIGURE 3D

A	B	C	D	E	F	G	H	I	J
195	NH1	ARG	A	35	-86.886	3.625	98.600	1.00	51.85
196	NH2	ARG	A	35	-85.569	4.552	96.942	1.00	53.73
197	C	ARG	A	35	-93.743	3.011	95.297	1.00	48.75
198	O	ARG	A	35	-94.246	3.909	95.958	1.00	49.28
199	N	TRP	A	36	-94.381	1.891	95.009	1.00	49.62
200	CA	TRP	A	36	-95.722	1.688	95.504	1.00	50.47
201	CB	TRP	A	36	-96.409	0.550	94.751	1.00	50.15
202	CG	TRP	A	36	-96.845	0.918	93.357	1.00	49.57
203	CD1	TRP	A	36	-96.282	0.500	92.191	1.00	48.94
204	NE1	TRP	A	36	-96.956	1.033	91.120	1.00	48.90
205	CE2	TRP	A	36	-97.985	1.813	91.581	1.00	48.49
206	CD2	TRP	A	36	-97.945	1.765	92.987	1.00	48.80
207	CE3	TRP	A	36	-98.902	2.490	93.704	1.00	48.56
208	CZ3	TRP	A	36	-99.857	3.220	93.005	1.00	49.05
209	CH2	TRP	A	36	-99.867	3.246	91.607	1.00	47.62
210	CH2	TRP	A	36	-98.940	2.553	90.879	1.00	48.27
211	C	TRP	A	36	-95.581	1.359	96.970	1.00	51.34
212	O	TRP	A	36	-94.558	0.821	97.388	1.00	51.46
213	N	ILE	A	37	-96.598	1.685	97.757	1.00	52.47
214	CA	ILE	A	37	-96.559	1.421	99.191	1.00	53.41
215	CB	ILE	A	37	-96.449	2.737	99.958	1.00	53.42
216	CG1	ILE	A	37	-94.987	3.025	100.270	1.00	53.87
217	CD1	ILE	A	37	-94.196	3.466	99.076	1.00	54.40
218	CG2	ILE	A	37	-97.246	2.685	101.244	1.00	54.45
219	C	ILE	A	37	-97.793	0.648	99.612	1.00	53.93
220	O	ILE	A	37	-97.812	-0.066	100.617	1.00	53.82
221	N	SER	A	38	-98.833	0.793	98.814	1.00	54.88
222	CA	SER	A	38	-100.072	0.103	99.078	1.00	55.80
223	CB	SER	A	38	-101.023	1.013	99.840	1.00	55.67
224	OG	SER	A	38	-100.863	2.357	99.413	1.00	56.45
225	C	SER	A	38	-100.650	-0.235	97.731	1.00	56.36
226	O	SER	A	38	-99.944	-0.241	96.726	1.00	56.35
227	N	ASP	A	39	-101.945	-0.488	97.696	1.00	57.13
228	CA	ASP	A	39	-102.560	-0.803	96.435	1.00	57.78
229	CB	ASP	A	39	-103.718	-1.766	96.627	1.00	58.12
230	CG	ASP	A	39	-103.988	-2.578	95.392	1.00	59.53
231	OD1	ASP	A	39	-105.111	-3.106	95.254	1.00	61.71
232	OD2	ASP	A	39	-103.127	-2.745	94.500	1.00	61.65
233	C	ASP	A	39	-103.046	0.452	95.753	1.00	57.97
234	O	ASP	A	39	-103.764	0.363	94.767	1.00	58.27
235	N	HIS	A	40	-102.660	1.620	96.261	1.00	58.00
236	CA	HIS	A	40	-103.128	2.865	95.654	1.00	58.81
237	CB	HIS	A	40	-104.625	3.072	95.920	1.00	59.47
238	CG	HIS	A	40	-105.071	2.575	97.257	1.00	61.31
239	ND1	HIS	A	40	-106.098	1.666	97.409	1.00	62.92
240	CE1	HIS	A	40	-106.264	1.405	98.694	1.00	63.69
241	NE2	HIS	A	40	-105.379	2.107	99.380	1.00	63.55
242	CD2	HIS	A	40	-104.618	2.845	98.504	1.00	62.40
243	C	HIS	A	40	-102.354	4.110	96.059	1.00	58.35
244	O	HIS	A	40	-102.744	5.229	95.720	1.00	58.06
245	N	GLU	A	41	-101.259	3.915	96.780	1.00	58.00

FIGURE 3E

A	B	C	D	E	F	G	H	I	J
246	CA	GLU	A	41	-100.409	5.027	97.167	1.00	57.73
247	CB	GLU	A	41	-100.372	5.162	98.690	1.00	57.77
248	CG	GLU	A	41	-101.698	5.542	99.334	1.00	57.46
249	CD	GLU	A	41	-101.505	6.168	100.703	1.00	56.70
250	OE1	GLU	A	41	-101.106	5.438	101.644	1.00	56.35
251	OE2	GLU	A	41	-101.736	7.391	100.832	1.00	55.22
252	C	GLU	A	41	-99.002	4.787	96.645	1.00	57.49
253	O	GLU	A	41	-98.593	3.642	96.493	1.00	57.77
254	N	TYR	A	42	-98.256	5.849	96.370	1.00	57.25
255	CA	TYR	A	42	-96.869	5.669	95.954	1.00	57.17
256	CB	TYR	A	42	-96.776	5.319	94.471	1.00	56.71
257	CG	TYR	A	42	-97.027	6.456	93.510	1.00	54.55
258	CD1	TYR	A	42	-96.053	7.407	93.272	1.00	52.96
259	CE1	TYR	A	42	-96.254	8.430	92.382	1.00	51.65
260	CZ	TYR	A	42	-97.440	8.513	91.693	1.00	51.43
261	OH	TYR	A	42	-97.622	9.545	90.803	1.00	49.55
262	CE2	TYR	A	42	-98.427	7.572	91.897	1.00	52.02
263	CD2	TYR	A	42	-98.215	6.546	92.802	1.00	53.03
264	C	TYR	A	42	-95.948	6.837	96.294	1.00	57.82
265	O	TYR	A	42	-96.333	8.003	96.191	1.00	57.89
266	N	LEU	A	43	-94.723	6.510	96.688	1.00	58.48
267	CA	LEU	A	43	-93.746	7.526	97.049	1.00	59.28
268	CB	LEU	A	43	-92.773	6.996	98.103	1.00	59.23
269	CG	LEU	A	43	-93.436	6.643	99.433	1.00	58.97
270	CD1	LEU	A	43	-92.447	6.044	100.404	1.00	57.55
271	CD2	LEU	A	43	-94.111	7.874	100.016	1.00	58.52
272	C	LEU	A	43	-92.975	8.011	95.849	1.00	59.92
273	O	LEU	A	43	-92.592	7.230	94.989	1.00	60.06
274	N	TYR	A	44	-92.762	9.318	95.799	1.00	61.07
275	CA	TYR	A	44	-91.976	9.941	94.749	1.00	62.31
276	CB	TYR	A	44	-92.881	10.720	93.798	1.00	61.95
277	CG	TYR	A	44	-92.187	11.345	92.608	1.00	61.54
278	CD1	TYR	A	44	-91.690	10.561	91.569	1.00	61.21
279	CE1	TYR	A	44	-91.058	11.136	90.474	1.00	60.70
280	CZ	TYR	A	44	-90.923	12.508	90.414	1.00	61.23
281	OH	TYR	A	44	-90.301	13.098	89.336	1.00	61.42
282	CE2	TYR	A	44	-91.411	13.303	91.433	1.00	60.86
283	CD2	TYR	A	44	-92.038	12.722	92.516	1.00	61.00
284	C	TYR	A	44	-91.030	10.867	95.492	1.00	63.51
285	O	TYR	A	44	-91.299	11.226	96.634	1.00	63.78
286	N	LYS	A	45	-89.916	11.232	94.873	1.00	65.00
287	CA	LYS	A	45	-88.948	12.098	95.532	1.00	66.61
288	CB	LYS	A	45	-87.641	11.335	95.779	1.00	66.63
289	CG	LYS	A	45	-86.657	12.048	96.701	1.00	67.24
290	CD	LYS	A	45	-85.319	11.316	96.767	1.00	68.31
291	CE	LYS	A	45	-84.269	12.139	97.509	1.00	68.73
292	NZ	LYS	A	45	-84.810	12.690	98.791	1.00	69.48
293	C	LYS	A	45	-88.702	13.332	94.671	1.00	67.68
294	O	LYS	A	45	-88.234	13.207	93.540	1.00	67.83
295	N	GLN	A	46	-89.017	14.518	95.198	1.00	69.00
296	CA	GLN	A	46	-88.868	15.752	94.415	1.00	70.27

FIGURE 3F

A	B	C	D	E	F	G	H	I	J
297	CB	GLN	A	46	-90.210	16.495	94.254	1.00	70.38
298	CG	GLN	A	46	-90.189	17.523	93.118	1.00	71.49
299	CD	GLN	A	46	-91.574	18.038	92.716	1.00	73.94
300	OE1	GLN	A	46	-92.566	17.300	92.755	1.00	74.29
301	NE2	GLN	A	46	-91.637	19.308	92.313	1.00	74.28
302	C	GLN	A	46	-87.771	16.710	94.891	1.00	70.79
303	O	GLN	A	46	-88.012	17.595	95.719	1.00	70.72
304	N	GLU	A	47	-86.569	16.518	94.344	1.00	71.70
305	CA	GLU	A	47	-85.413	17.393	94.580	1.00	72.37
306	CB	GLU	A	47	-85.480	18.608	93.644	1.00	72.68
307	CG	GLU	A	47	-85.040	18.336	92.211	1.00	73.91
308	CD	GLU	A	47	-83.561	18.604	91.986	1.00	75.82
309	OE1	GLU	A	47	-83.116	19.761	92.179	1.00	76.43
310	OE2	GLU	A	47	-82.840	17.657	91.612	1.00	76.92
311	C	GLU	A	47	-85.240	17.869	96.019	1.00	72.44
312	O	GLU	A	47	-84.595	18.894	96.268	1.00	72.64
313	N	ASN	A	48	-85.801	17.116	96.959	1.00	72.46
314	CA	ASN	A	48	-85.737	17.471	98.368	1.00	72.28
315	CB	ASN	A	48	-86.404	18.833	98.599	1.00	72.52
316	CG	ASN	A	48	-85.409	19.943	98.933	1.00	73.27
317	OD1	ASN	A	48	-84.235	19.690	99.213	1.00	74.24
318	ND2	ASN	A	48	-85.890	21.185	98.919	1.00	73.24
319	C	ASN	A	48	-86.443	16.444	99.243	1.00	72.00
320	O	ASN	A	48	-85.861	15.902	100.186	1.00	72.38
321	N	ASN	A	49	-87.695	16.158	98.902	1.00	71.24
322	CA	ASN	A	49	-88.567	15.415	99.796	1.00	70.45
323	CB	ASN	A	49	-89.521	16.417	100.442	1.00	70.52
324	CG	ASN	A	49	-90.018	17.461	99.449	1.00	70.98
325	OD1	ASN	A	49	-90.640	18.460	99.828	1.00	70.94
326	ND2	ASN	A	49	-89.742	17.233	98.166	1.00	70.86
327	C	ASN	A	49	-89.396	14.293	99.200	1.00	69.91
328	O	ASN	A	49	-89.781	14.321	98.028	1.00	70.04
329	N	ILE	A	50	-89.701	13.316	100.042	1.00	69.04
330	CA	ILE	A	50	-90.539	12.205	99.641	1.00	68.26
331	CB	ILE	A	50	-90.337	11.008	100.573	1.00	68.17
332	CG1	ILE	A	50	-88.957	10.390	100.357	1.00	68.29
333	CD1	ILE	A	50	-87.916	10.833	101.355	1.00	68.40
334	CG2	ILE	A	50	-91.408	9.974	100.328	1.00	68.21
335	C	ILE	A	50	-92.001	12.622	99.655	1.00	67.54
336	O	ILE	A	50	-92.544	12.984	100.696	1.00	67.50
337	N	LEU	A	51	-92.628	12.586	98.488	1.00	66.76
338	CA	LEU	A	51	-94.043	12.899	98.366	1.00	65.98
339	CB	LEU	A	51	-94.323	13.580	97.024	1.00	66.02
340	CG	LEU	A	51	-94.640	15.082	97.012	1.00	65.96
341	CD1	LEU	A	51	-93.931	15.820	98.139	1.00	65.12
342	CD2	LEU	A	51	-94.322	15.711	95.652	1.00	65.83
343	C	LEU	A	51	-94.859	11.621	98.471	1.00	65.39
344	O	LEU	A	51	-94.350	10.533	98.225	1.00	65.35
345	N	VAL	A	52	-96.119	11.748	98.869	1.00	64.69
346	CA	VAL	A	52	-97.026	10.608	98.869	1.00	63.91
347	CB	VAL	A	52	-97.772	10.450	100.184	1.00	64.07

FIGURE 3G

A	B	C	D	E	F	G	H	I	J
348	CG1	VAL	A	52	-97.047	11.166	101.304	1.00	64.22
349	CG2	VAL	A	52	-98.002	8.966	100.488	1.00	63.60
350	C	VAL	A	52	-98.082	10.913	97.839	1.00	63.33
351	O	VAL	A	52	-98.626	12.013	97.823	1.00	63.43
352	N	PHE	A	53	-98.383	9.949	96.981	1.00	62.56
353	CA	PHE	A	53	-99.390	10.165	95.959	1.00	61.64
354	CB	PHE	A	53	-98.778	10.047	94.569	1.00	61.67
355	CG	PHE	A	53	-98.025	11.265	94.117	1.00	61.05
356	CD1	PHE	A	53	-96.751	11.523	94.586	1.00	61.29
357	CE1	PHE	A	53	-96.053	12.634	94.151	1.00	61.02
358	CZ	PHE	A	53	-96.625	13.495	93.236	1.00	60.95
359	CE2	PHE	A	53	-97.892	13.244	92.756	1.00	60.57
360	CD2	PHE	A	53	-98.580	12.130	93.192	1.00	60.71
361	C	PHE	A	53	-100.505	9.150	96.078	1.00	61.31
362	O	PHE	A	53	-100.254	7.965	96.304	1.00	61.35
363	N	ASN	A	54	-101.742	9.620	95.960	1.00	60.84
364	CA	ASN	A	54	-102.876	8.717	95.857	1.00	60.32
365	CB	ASN	A	54	-104.179	9.395	96.288	1.00	60.41
366	CG	ASN	A	54	-105.340	8.409	96.429	1.00	60.97
367	OD1	ASN	A	54	-106.103	8.477	97.390	1.00	61.46
368	ND2	ASN	A	54	-105.477	7.493	95.470	1.00	60.70
369	C	ASN	A	54	-102.936	8.393	94.382	1.00	59.76
370	O	ASN	A	54	-102.896	9.295	93.543	1.00	59.60
371	N	ALA	A	55	-103.004	7.115	94.047	1.00	59.38
372	CA	ALA	A	55	-103.065	6.740	92.641	1.00	59.02
373	CB	ALA	A	55	-102.952	5.237	92.488	1.00	59.06
374	C	ALA	A	55	-104.322	7.276	91.937	1.00	58.71
375	O	ALA	A	55	-104.242	7.767	90.816	1.00	58.09
376	N	GLU	A	56	-105.473	7.195	92.598	1.00	58.94
377	CA	GLU	A	56	-106.736	7.646	91.991	1.00	59.29
378	CB	GLU	A	56	-107.930	7.354	92.906	1.00	59.17
379	CG	GLU	A	56	-108.493	5.948	92.791	1.00	59.64
380	CD	GLU	A	56	-109.508	5.794	91.670	1.00	59.62
381	OE1	GLU	A	56	-109.458	6.558	90.681	1.00	59.64
382	OE2	GLU	A	56	-110.371	4.904	91.782	1.00	59.77
383	C	GLU	A	56	-106.787	9.115	91.563	1.00	59.42
384	O	GLU	A	56	-107.172	9.421	90.434	1.00	59.29
385	N	TYR	A	57	-106.388	10.023	92.448	1.00	59.76
386	CA	TYR	A	57	-106.556	11.453	92.162	1.00	60.14
387	CB	TYR	A	57	-107.191	12.151	93.365	1.00	60.19
388	CG	TYR	A	57	-108.191	11.284	94.093	1.00	60.37
389	CD1	TYR	A	57	-109.455	11.059	93.565	1.00	60.93
390	CE1	TYR	A	57	-110.373	10.267	94.226	1.00	60.78
391	CZ	TYR	A	57	-110.030	9.676	95.425	1.00	60.79
392	OH	TYR	A	57	-110.941	8.877	96.072	1.00	60.43
393	CE2	TYR	A	57	-108.775	9.871	95.966	1.00	60.89
394	CD2	TYR	A	57	-107.865	10.677	95.299	1.00	60.70
395	C	TYR	A	57	-105.297	12.200	91.743	1.00	60.44
396	O	TYR	A	57	-105.382	13.286	91.170	1.00	60.16
397	N	GLY	A	58	-104.132	11.630	92.037	1.00	60.85
398	CA	GLY	A	58	-102.881	12.281	91.700	1.00	61.42

FIGURE 3H

A	B	C	D	E	F	G	H	I	J
399	C	GLY	A	58	-102.555	13.377	92.690	1.00	61.93
400	O	GLY	A	58	-101.717	14.243	92.431	1.00	61.57
401	N	ASN	A	59	-103.239	13.348	93.829	1.00	62.68
402	CA	ASN	A	59	-102.990	14.341	94.863	1.00	63.62
403	CB	ASN	A	59	-104.259	14.646	95.659	1.00	63.34
404	CG	ASN	A	59	-104.818	13.429	96.334	1.00	63.30
405	OD1	ASN	A	59	-105.016	12.395	95.695	1.00	63.69
406	ND2	ASN	A	59	-105.068	13.531	97.637	1.00	62.78
407	C	ASN	A	59	-101.864	13.873	95.780	1.00	64.23
408	O	ASN	A	59	-101.847	12.729	96.236	1.00	64.24
409	N	SER	A	60	-100.918	14.764	96.038	1.00	65.01
410	CA	SER	A	60	-99.784	14.433	96.884	1.00	65.72
411	CB	SER	A	60	-98.506	14.431	96.057	1.00	65.53
412	OG	SER	A	60	-98.315	15.697	95.455	1.00	65.16
413	C	SER	A	60	-99.610	15.389	98.061	1.00	66.42
414	O	SER	A	60	-99.840	16.597	97.949	1.00	66.14
415	N	SER	A	61	-99.191	14.819	99.186	1.00	67.34
416	CA	SER	A	61	-98.905	15.568	100.397	1.00	68.04
417	CB	SER	A	61	-99.960	15.278	101.468	1.00	68.06
418	OG	SER	A	61	-99.954	13.909	101.847	1.00	66.79
419	C	SER	A	61	-97.538	15.109	100.878	1.00	68.90
420	O	SER	A	61	-97.251	13.912	100.892	1.00	68.87
421	N	VAL	A	62	-96.698	16.063	101.266	1.00	69.78
422	CA	VAL	A	62	-95.341	15.763	101.717	1.00	70.58
423	CB	VAL	A	62	-94.659	17.027	102.273	1.00	70.42
424	CG1	VAL	A	62	-93.293	16.697	102.833	1.00	70.70
425	CG2	VAL	A	62	-94.555	18.092	101.186	1.00	70.79
426	C	VAL	A	62	-95.307	14.638	102.757	1.00	71.13
427	O	VAL	A	62	-95.955	14.728	103.800	1.00	71.06
428	N	PHE	A	63	-94.556	13.578	102.460	1.00	71.86
429	CA	PHE	A	63	-94.441	12.438	103.370	1.00	72.69
430	CB	PHE	A	63	-94.274	11.133	102.597	1.00	72.66
431	CG	PHE	A	63	-94.030	9.946	103.481	1.00	73.06
432	CD1	PHE	A	63	-92.762	9.675	103.963	1.00	73.09
433	CE1	PHE	A	63	-92.538	8.597	104.789	1.00	73.04
434	CZ	PHE	A	63	-93.585	7.766	105.142	1.00	73.31
435	CE2	PHE	A	63	-94.854	8.023	104.670	1.00	73.34
436	CD2	PHE	A	63	-95.074	9.113	103.848	1.00	73.44
437	C	PHE	A	63	-93.258	12.583	104.312	1.00	73.13
438	O	PHE	A	63	-93.321	12.214	105.486	1.00	73.11
439	N	LEU	A	64	-92.161	13.083	103.764	1.00	73.76
440	CA	LEU	A	64	-90.956	13.295	104.530	1.00	74.42
441	CB	LEU	A	64	-90.051	12.073	104.452	1.00	74.35
442	CG	LEU	A	64	-88.873	12.070	105.425	1.00	74.56
443	CD1	LEU	A	64	-89.369	11.956	106.859	1.00	74.40
444	CD2	LEU	A	64	-87.905	10.945	105.099	1.00	74.72
445	C	LEU	A	64	-90.265	14.490	103.915	1.00	75.00
446	O	LEU	A	64	-89.856	14.449	102.755	1.00	75.07
447	N	GLU	A	65	-90.148	15.561	104.688	1.00	75.74
448	CA	GLU	A	65	-89.515	16.766	104.187	1.00	76.40
449	CB	GLU	A	65	-90.053	18.014	104.893	1.00	76.68

FIGURE 31

A	B	C	D	E	F	G	H	I	J
450	CG	GLU	A	65	-90.491	17.786	106.332	1.00	77.45
451	CD	GLU	A	65	-91.151	19.011	106.948	1.00	79.22
452	OE1	GLU	A	65	-91.825	18.859	107.995	1.00	79.11
453	OE2	GLU	A	65	-90.999	20.127	106.388	1.00	79.23
454	C	GLU	A	65	-88.008	16.674	104.299	1.00	76.69
455	O	GLU	A	65	-87.468	16.077	105.232	1.00	76.64
456	N	ASN	A	66	-87.351	17.253	103.304	1.00	77.07
457	CA	ASN	A	66	-85.904	17.310	103.197	1.00	77.55
458	CB	ASN	A	66	-85.569	18.446	102.232	1.00	77.84
459	CG	ASN	A	66	-86.537	19.623	102.371	1.00	78.43
460	OD1	ASN	A	66	-86.832	20.063	103.482	1.00	79.16
461	ND2	ASN	A	66	-87.051	20.115	101.249	1.00	78.36
462	C	ASN	A	66	-85.172	17.550	104.520	1.00	77.66
463	O	ASN	A	66	-84.447	16.684	105.021	1.00	77.65
464	N	SER	A	67	-85.387	18.742	105.068	1.00	77.67
465	CA	SER	A	67	-84.712	19.231	106.268	1.00	77.74
466	CB	SER	A	67	-85.318	20.579	106.671	1.00	77.78
467	OG	SER	A	67	-86.727	20.481	106.792	1.00	77.45
468	C	SER	A	67	-84.683	18.305	107.485	1.00	77.85
469	O	SER	A	67	-83.734	18.349	108.278	1.00	77.93
470	N	THR	A	68	-85.713	17.478	107.634	1.00	77.74
471	CA	THR	A	68	-85.826	16.575	108.779	1.00	77.68
472	CB	THR	A	68	-86.746	15.393	108.440	1.00	77.66
473	OG1	THR	A	68	-87.912	15.871	107.756	1.00	77.83
474	CG2	THR	A	68	-87.301	14.767	109.716	1.00	77.56
475	C	THR	A	68	-84.488	16.043	109.302	1.00	77.67
476	O	THR	A	68	-84.275	15.965	110.514	1.00	77.61
477	N	PHE	A	69	-83.592	15.679	108.390	1.00	77.66
478	CA	PHE	A	69	-82.309	15.108	108.786	1.00	77.63
479	CB	PHE	A	69	-82.122	13.724	108.153	1.00	77.52
480	CG	PHE	A	69	-83.287	12.804	108.352	1.00	76.97
481	CD1	PHE	A	69	-83.546	12.252	109.593	1.00	76.96
482	CE1	PHE	A	69	-84.621	11.405	109.780	1.00	77.06
483	CZ	PHE	A	69	-85.453	11.101	108.719	1.00	77.00
484	CE2	PHE	A	69	-85.201	11.646	107.475	1.00	77.00
485	CD2	PHE	A	69	-84.123	12.492	107.296	1.00	76.74
486	C	PHE	A	69	-81.113	15.985	108.430	1.00	77.81
487	O	PHE	A	69	-79.985	15.492	108.362	1.00	77.86
488	N	ASP	A	70	-81.332	17.277	108.204	1.00	77.78
489	CA	ASP	A	70	-80.197	18.120	107.846	1.00	77.79
490	CB	ASP	A	70	-80.632	19.465	107.261	1.00	78.10
491	CG	ASP	A	70	-81.500	20.261	108.204	1.00	79.05
492	OD1	ASP	A	70	-82.274	21.113	107.713	1.00	79.76
493	OD2	ASP	A	70	-81.480	20.106	109.444	1.00	79.98
494	C	ASP	A	70	-79.237	18.286	109.023	1.00	77.42
495	O	ASP	A	70	-78.149	18.839	108.872	1.00	77.46
496	N	GLU	A	71	-79.646	17.794	110.190	1.00	76.84
497	CA	GLU	A	71	-78.791	17.824	111.370	1.00	76.39
498	CB	GLU	A	71	-79.466	18.565	112.528	1.00	76.72
499	CG	GLU	A	71	-79.637	20.061	112.283	1.00	77.81
500	CD	GLU	A	71	-79.450	20.901	113.540	1.00	79.41

FIGURE 3J

A	B	C	D	E	F	G	H	I	J
501	OE1	GLU	A	71	-79.341	20.323	114.647	1.00	79.94
502	OE2	GLU	A	71	-79.402	22.147	113.420	1.00	79.88
503	C	GLU	A	71	-78.434	16.398	111.765	1.00	75.74
504	O	GLU	A	71	-77.956	16.139	112.876	1.00	75.50
505	N	PHE	A	72	-78.679	15.479	110.833	1.00	74.83
506	CA	PHE	A	72	-78.382	14.064	111.016	1.00	73.85
507	CB	PHE	A	72	-78.782	13.290	109.760	1.00	74.04
508	CG	PHE	A	72	-78.620	11.803	109.877	1.00	74.10
509	CD1	PHE	A	72	-77.575	11.159	109.234	1.00	73.80
510	CE1	PHE	A	72	-77.424	9.798	109.329	1.00	73.80
511	CZ	PHE	A	72	-78.324	9.055	110.065	1.00	74.51
512	CE2	PHE	A	72	-79.377	9.680	110.708	1.00	74.63
513	CD2	PHE	A	72	-79.523	11.048	110.609	1.00	74.10
514	C	PHE	A	72	-76.900	13.861	111.312	1.00	73.03
515	O	PHE	A	72	-76.529	12.977	112.090	1.00	73.05
516	N	GLY	A	73	-76.060	14.680	110.685	1.00	71.87
517	CA	GLY	A	73	-74.625	14.612	110.895	1.00	70.69
518	C	GLY	A	73	-73.888	14.010	109.719	1.00	69.83
519	O	GLY	A	73	-72.656	14.057	109.642	1.00	69.87
520	N	HIS	A	74	-74.650	13.439	108.794	1.00	68.75
521	CA	HIS	A	74	-74.078	12.820	107.611	1.00	67.57
522	CB	HIS	A	74	-74.037	11.303	107.776	1.00	67.49
523	CG	HIS	A	74	-73.715	10.851	109.168	1.00	66.51
524	ND1	HIS	A	74	-72.437	10.527	109.570	1.00	66.10
525	CE1	HIS	A	74	-72.457	10.154	110.838	1.00	65.84
526	NE2	HIS	A	74	-73.703	10.227	111.274	1.00	65.59
527	CD2	HIS	A	74	-74.508	10.660	110.249	1.00	66.42
528	C	HIS	A	74	-74.921	13.191	106.403	1.00	66.95
529	O	HIS	A	74	-75.683	14.158	106.445	1.00	67.33
530	N	SER	A	75	-74.772	12.446	105.315	1.00	65.79
531	CA	SER	A	75	-75.580	12.690	104.125	1.00	64.59
532	CB	SER	A	75	-74.735	13.253	102.981	1.00	64.75
533	OG	SER	A	75	-73.941	12.249	102.382	1.00	64.91
534	C	SER	A	75	-76.263	11.394	103.712	1.00	63.72
535	O	SER	A	75	-75.625	10.347	103.606	1.00	63.44
536	N	ILE	A	76	-77.563	11.471	103.477	1.00	62.64
537	CA	ILE	A	76	-78.347	10.284	103.173	1.00	61.64
538	CB	ILE	A	76	-79.801	10.503	103.594	1.00	61.65
539	CG1	ILE	A	76	-79.855	10.744	105.104	1.00	61.22
540	CD1	ILE	A	76	-79.505	9.531	105.916	1.00	60.30
541	CG2	ILE	A	76	-80.663	9.305	103.195	1.00	61.36
542	C	ILE	A	76	-78.271	9.779	101.733	1.00	61.23
543	O	ILE	A	76	-78.657	10.472	100.781	1.00	60.88
544	N	ASN	A	77	-77.785	8.548	101.594	1.00	60.50
545	CA	ASN	A	77	-77.660	7.915	100.289	1.00	59.70
546	CB	ASN	A	77	-76.639	6.774	100.340	1.00	59.69
547	CG	ASN	A	77	-76.557	6.000	99.035	1.00	59.77
548	OD1	ASN	A	77	-76.121	6.525	98.006	1.00	59.13
549	ND2	ASN	A	77	-76.973	4.742	99.075	1.00	59.64
550	C	ASN	A	77	-79.010	7.410	99.810	1.00	59.12
551	O	ASN	A	77	-79.378	7.590	98.648	1.00	58.95

FIGURE 3K

A	B	C	D	E	F	G	H	I	J
552	N	ASP	A	78	-79.757	6.796	100.716	1.00	58.58
553	CA	ASP	A	78	-81.071	6.269	100.371	1.00	58.27
554	CB	ASP	A	78	-80.938	4.955	99.591	1.00	58.61
555	CG	ASP	A	78	-81.948	4.838	98.455	1.00	60.42
556	OD1	ASP	A	78	-83.168	4.702	98.734	1.00	60.92
557	OD2	ASP	A	78	-81.607	4.867	97.246	1.00	61.79
558	C	ASP	A	78	-81.911	6.045	101.624	1.00	57.52
559	O	ASP	A	78	-81.425	6.129	102.750	1.00	57.00
560	N	TYR	A	79	-83.182	5.748	101.407	1.00	56.98
561	CA	TYR	A	79	-84.116	5.528	102.495	1.00	56.43
562	CB	TYR	A	79	-85.053	6.735	102.638	1.00	56.46
563	CG	TYR	A	79	-85.965	6.926	101.445	1.00	57.21
564	CD1	TYR	A	79	-85.548	7.647	100.338	1.00	58.14
565	CE1	TYR	A	79	-86.374	7.810	99.236	1.00	59.98
566	CZ	TYR	A	79	-87.637	7.240	99.234	1.00	60.76
567	OH	TYR	A	79	-88.464	7.398	98.139	1.00	61.91
568	CE2	TYR	A	79	-88.073	6.516	100.323	1.00	59.61
569	CD2	TYR	A	79	-87.237	6.365	101.421	1.00	58.25
570	C	TYR	A	79	-84.931	4.275	102.206	1.00	55.67
571	O	TYR	A	79	-85.059	3.853	101.067	1.00	55.35
572	N	SER	A	80	-85.491	3.686	103.245	1.00	55.30
573	CA	SER	A	80	-86.341	2.529	103.061	1.00	54.89
574	CB	SER	A	80	-85.538	1.233	103.109	1.00	54.78
575	OG	SER	A	80	-86.410	0.128	103.084	1.00	53.76
576	C	SER	A	80	-87.416	2.518	104.129	1.00	54.94
577	O	SER	A	80	-87.139	2.362	105.318	1.00	54.89
578	N	ILE	A	81	-88.652	2.682	103.691	1.00	54.80
579	CA	ILE	A	81	-89.765	2.695	104.604	1.00	54.71
580	CB	ILE	A	81	-90.858	3.608	104.068	1.00	54.69
581	CG1	ILE	A	81	-90.223	4.877	103.504	1.00	55.47
582	CD1	ILE	A	81	-90.789	6.149	104.053	1.00	55.70
583	CG2	ILE	A	81	-91.889	3.891	105.149	1.00	55.04
584	C	ILE	A	81	-90.326	1.309	104.827	1.00	54.66
585	O	ILE	A	81	-90.635	0.582	103.879	1.00	54.51
586	N	SER	A	82	-90.442	0.942	106.095	1.00	54.62
587	CA	SER	A	82	-91.079	-0.299	106.457	1.00	54.72
588	CB	SER	A	82	-91.280	-0.350	107.976	1.00	55.07
589	OG	SER	A	82	-91.880	-1.575	108.381	1.00	55.75
590	C	SER	A	82	-92.433	-0.340	105.750	1.00	54.55
591	O	SER	A	82	-93.040	0.695	105.498	1.00	54.24
592	N	PRO	A	83	-92.909	-1.532	105.423	1.00	54.57
593	CA	PRO	A	83	-94.216	-1.669	104.784	1.00	54.68
594	CB	PRO	A	83	-94.440	-3.181	104.779	1.00	54.57
595	CG	PRO	A	83	-93.083	-3.768	104.845	1.00	54.64
596	CD	PRO	A	83	-92.249	-2.828	105.647	1.00	54.52
597	C	PRO	A	83	-95.223	-1.015	105.708	1.00	54.77
598	O	PRO	A	83	-96.334	-0.658	105.319	1.00	54.48
599	N	ASP	A	84	-94.781	-0.858	106.950	1.00	54.99
600	CA	ASP	A	84	-95.563	-0.294	108.040	1.00	55.12
601	CB	ASP	A	84	-94.763	-0.421	109.331	1.00	55.15
602	CG	ASP	A	84	-95.363	-1.402	110.258	1.00	55.64



FIGURE 3L

A	B	C	D	E	F	G	H	I	J
603	OD1	ASP	A	84	-94.765	-1.671	111.312	1.00	56.59
604	OD2	ASP	A	84	-96.449	-1.958	110.002	1.00	57.31
605	C	ASP	A	84	-95.918	1.165	107.914	1.00	55.01
606	O	ASP	A	84	-96.973	1.595	108.387	1.00	55.07
607	N	GLY	A	85	-95.017	1.929	107.312	1.00	54.70
608	CA	GLY	A	85	-95.158	3.366	107.279	1.00	54.30
609	C	GLY	A	85	-94.753	3.893	108.647	1.00	54.01
610	O	GLY	A	85	-94.739	5.098	108.871	1.00	54.26
611	N	GLN	A	86	-94.407	2.979	109.554	1.00	53.65
612	CA	GLN	A	86	-94.053	3.319	110.934	1.00	53.40
613	CB	GLN	A	86	-94.536	2.226	111.889	1.00	53.22
614	CG	GLN	A	86	-96.039	2.080	111.914	1.00	53.47
615	CD	GLN	A	86	-96.486	0.894	112.723	1.00	53.71
616	OE1	GLN	A	86	-95.703	0.338	113.497	1.00	54.47
617	NE2	GLN	A	86	-97.740	0.490	112.546	1.00	52.64
618	C	GLN	A	86	-92.571	3.581	111.179	1.00	53.30
619	O	GLN	A	86	-92.183	3.988	112.270	1.00	53.42
620	N	PHE	A	87	-91.733	3.329	110.183	1.00	53.22
621	CA	PHE	A	87	-90.314	3.607	110.333	1.00	52.63
622	CB	PHE	A	87	-89.601	2.456	111.038	1.00	52.99
623	CG	PHE	A	87	-90.205	2.066	112.355	1.00	53.72
624	CD1	PHE	A	87	-89.882	2.751	113.515	1.00	54.78
625	CE1	PHE	A	87	-90.430	2.378	114.733	1.00	55.42
626	CZ	PHE	A	87	-91.302	1.309	114.800	1.00	54.70
627	CE2	PHE	A	87	-91.623	0.619	113.652	1.00	54.87
628	CD2	PHE	A	87	-91.071	0.993	112.438	1.00	53.75
629	C	PHE	A	87	-89.675	3.794	108.981	1.00	52.09
630	O	PHE	A	87	-90.082	3.170	108.004	1.00	51.94
631	N	ILE	A	88	-88.673	4.659	108.920	1.00	51.55
632	CA	ILE	A	88	-87.891	4.799	107.704	1.00	51.12
633	CB	ILE	A	88	-88.022	6.200	107.088	1.00	51.27
634	CG1	ILE	A	88	-87.101	6.316	105.869	1.00	52.21
635	CD1	ILE	A	88	-87.378	7.528	104.998	1.00	52.90
636	CG2	ILE	A	88	-87.682	7.279	108.103	1.00	51.87
637	C	ILE	A	88	-86.431	4.442	107.991	1.00	50.47
638	O	ILE	A	88	-85.828	4.932	108.948	1.00	50.53
639	N	LEU	A	89	-85.877	3.551	107.182	1.00	49.59
640	CA	LEU	A	89	-84.487	3.162	107.331	1.00	48.54
641	CB	LEU	A	89	-84.263	1.793	106.705	1.00	48.62
642	CG	LEU	A	89	-82.852	1.224	106.747	1.00	48.60
643	CD1	LEU	A	89	-82.590	0.405	105.497	1.00	49.00
644	CD2	LEU	A	89	-82.681	0.379	107.982	1.00	48.32
645	C	LEU	A	89	-83.647	4.198	106.612	1.00	47.95
646	O	LEU	A	89	-83.940	4.562	105.479	1.00	47.88
647	N	LEU	A	90	-82.610	4.689	107.270	1.00	47.21
648	CA	LEU	A	90	-81.755	5.692	106.656	1.00	46.75
649	CB	LEU	A	90	-81.589	6.896	107.578	1.00	47.00
650	CG	LEU	A	90	-82.872	7.713	107.691	1.00	47.93
651	CD1	LEU	A	90	-82.628	8.934	108.555	1.00	49.24
652	CD2	LEU	A	90	-83.339	8.118	106.301	1.00	48.21
653	C	LEU	A	90	-80.407	5.089	106.335	1.00	45.87

FIGURE 3M

A	B	C	D	E	F	G	H	I	J
654	O	LEU	A	90	-79.722	4.556	107.211	1.00	45.76
655	N	GLU	A	91	-80.029	5.181	105.070	1.00	44.80
656	CA	GLU	A	91	-78.790	4.584	104.613	1.00	43.70
657	CB	GLU	A	91	-79.048	3.792	103.334	1.00	43.58
658	CG	GLU	A	91	-77.796	3.334	102.611	1.00	43.64
659	CD	GLU	A	91	-78.128	2.469	101.414	1.00	43.67
660	OE1	GLU	A	91	-77.745	2.853	100.295	1.00	43.86
661	OE2	GLU	A	91	-78.781	1.416	101.601	1.00	42.46
662	C	GLU	A	91	-77.725	5.636	104.380	1.00	42.84
663	O	GLU	A	91	-77.952	6.613	103.664	1.00	42.25
664	N	TYR	A	92	-76.561	5.432	104.990	1.00	42.10
665	CA	TYR	A	92	-75.464	6.369	104.811	1.00	41.77
666	CB	TYR	A	92	-75.600	7.567	105.766	1.00	41.94
667	CG	TYR	A	92	-75.429	7.233	107.222	1.00	40.43
668	CD1	TYR	A	92	-76.391	6.521	107.905	1.00	40.23
669	CE1	TYR	A	92	-76.221	6.212	109.242	1.00	41.40
670	CZ	TYR	A	92	-75.087	6.638	109.895	1.00	40.80
671	OH	TYR	A	92	-74.895	6.340	111.221	1.00	42.34
672	CE2	TYR	A	92	-74.121	7.340	109.225	1.00	39.74
673	CD2	TYR	A	92	-74.295	7.634	107.910	1.00	39.63
674	C	TYR	A	92	-74.107	5.686	104.954	1.00	41.71
675	O	TYR	A	92	-74.023	4.546	105.419	1.00	41.24
676	N	ASN	A	93	-73.055	6.400	104.555	1.00	41.38
677	CA	ASN	A	93	-71.706	5.859	104.543	1.00	41.55
678	CB	ASN	A	93	-71.298	5.352	105.925	1.00	42.02
679	CG	ASN	A	93	-71.043	6.482	106.901	1.00	43.73
680	OD1	ASN	A	93	-70.671	7.588	106.502	1.00	45.09
681	ND2	ASN	A	93	-71.249	6.213	108.189	1.00	44.17
682	C	ASN	A	93	-71.606	4.747	103.507	1.00	40.94
683	O	ASN	A	93	-70.962	3.725	103.722	1.00	40.20
684	N	TYR	A	94	-72.274	4.976	102.386	1.00	40.86
685	CA	TYR	A	94	-72.307	4.056	101.270	1.00	40.82
686	CB	TYR	A	94	-73.217	4.620	100.179	1.00	41.16
687	CG	TYR	A	94	-73.168	3.873	98.858	1.00	42.03
688	CD1	TYR	A	94	-73.912	2.716	98.667	1.00	41.93
689	CE1	TYR	A	94	-73.881	2.037	97.464	1.00	42.75
690	CZ	TYR	A	94	-73.098	2.508	96.431	1.00	42.95
691	OH	TYR	A	94	-73.071	1.818	95.239	1.00	45.07
692	CE2	TYR	A	94	-72.354	3.656	96.586	1.00	42.83
693	CD2	TYR	A	94	-72.394	4.340	97.797	1.00	41.85
694	C	TYR	A	94	-70.924	3.788	100.686	1.00	40.68
695	O	TYR	A	94	-70.237	4.702	100.231	1.00	41.17
696	N	VAL	A	95	-70.506	2.530	100.722	1.00	39.96
697	CA	VAL	A	95	-69.270	2.140	100.063	1.00	39.34
698	CB	VAL	A	95	-68.164	1.733	101.047	1.00	39.31
699	CG1	VAL	A	95	-67.994	2.793	102.125	1.00	39.60
700	CG2	VAL	A	95	-68.486	0.402	101.674	1.00	40.76
701	C	VAL	A	95	-69.614	0.999	99.095	1.00	38.41
702	O	VAL	A	95	-69.979	-0.115	99.499	1.00	38.29
703	N	LYS	A	96	-69.545	1.317	97.812	1.00	37.32
704	CA	LYS	A	96	-69.818	0.360	96.759	1.00	36.43

FIGURE 3N

A	B	C	D	E	F	G	H	I	J
705	CB	LYS	A	96	-69.625	1.039	95.410	1.00	36.77
706	CG	LYS	A	96	-69.569	0.073	94.248	1.00	37.54
707	CD	LYS	A	96	-69.843	0.780	92.938	1.00	36.45
708	CE	LYS	A	96	-69.948	-0.234	91.800	1.00	36.87
709	NZ	LYS	A	96	-68.755	-1.131	91.791	1.00	34.18
710	C	LYS	A	96	-68.866	-0.820	96.820	1.00	35.47
711	O	LYS	A	96	-67.672	-0.634	97.073	1.00	34.98
712	N	GLN	A	97	-69.385	-2.035	96.634	1.00	33.71
713	CA	GLN	A	97	-68.473	-3.159	96.451	1.00	32.87
714	CB	GLN	A	97	-68.746	-4.338	97.387	1.00	33.00
715	CG	GLN	A	97	-67.828	-5.535	97.076	1.00	34.97
716	CD	GLN	A	97	-67.804	-6.613	98.149	1.00	36.12
717	OE1	GLN	A	97	-66.746	-6.910	98.709	1.00	37.95
718	NE2	GLN	A	97	-68.951	-7.218	98.414	1.00	37.01
719	C	GLN	A	97	-68.519	-3.570	94.969	1.00	31.95
720	O	GLN	A	97	-67.883	-2.926	94.108	1.00	30.84
721	N	TRP	A	98	-69.303	-4.601	94.670	1.00	30.50
722	CA	TRP	A	98	-69.412	-5.071	93.300	1.00	30.31
723	CB	TRP	A	98	-69.458	-6.607	93.235	1.00	29.81
724	CG	TRP	A	98	-68.354	-7.265	94.042	1.00	26.78
725	CD1	TRP	A	98	-68.487	-8.325	94.896	1.00	25.79
726	NE1	TRP	A	98	-67.276	-8.642	95.459	1.00	24.42
727	CE2	TRP	A	98	-66.318	-7.793	94.961	1.00	24.75
728	CD2	TRP	A	98	-66.961	-6.904	94.075	1.00	24.84
729	CE3	TRP	A	98	-66.190	-5.931	93.433	1.00	22.20
730	CZ3	TRP	A	98	-64.840	-5.866	93.696	1.00	21.42
731	CH2	TRP	A	98	-64.227	-6.765	94.573	1.00	23.42
732	CZ2	TRP	A	98	-64.951	-7.723	95.231	1.00	23.60
733	C	TRP	A	98	-70.596	-4.414	92.593	1.00	30.53
734	O	TRP	A	98	-70.938	-3.275	92.887	1.00	31.01
735	N	ARG	A	99	-71.217	-5.110	91.652	1.00	30.41
736	CA	ARG	A	99	-72.287	-4.486	90.884	1.00	29.78
737	CB	ARG	A	99	-72.688	-5.349	89.710	1.00	30.16
738	CG	ARG	A	99	-73.689	-4.661	88.806	1.00	30.00
739	CD	ARG	A	99	-74.321	-5.596	87.831	1.00	32.10
740	NE	ARG	A	99	-73.349	-6.235	86.953	1.00	31.79
741	CZ	ARG	A	99	-72.956	-5.724	85.795	1.00	35.74
742	NH1	ARG	A	99	-73.430	-4.546	85.405	1.00	34.55
743	NH2	ARG	A	99	-72.078	-6.379	85.022	1.00	36.45
744	C	ARG	A	99	-73.530	-4.164	91.691	1.00	29.82
745	O	ARG	A	99	-74.207	-3.157	91.452	1.00	29.36
746	N	HIS	A	100	-73.852	-5.028	92.634	1.00	29.79
747	CA	HIS	A	100	-75.030	-4.786	93.450	1.00	30.01
748	CB	HIS	A	100	-76.027	-5.943	93.328	1.00	29.65
749	CG	HIS	A	100	-76.377	-6.288	91.913	1.00	30.33
750	ND1	HIS	A	100	-77.319	-5.587	91.188	1.00	29.96
751	CE1	HIS	A	100	-77.422	-6.114	89.978	1.00	30.33
752	NE2	HIS	A	100	-76.571	-7.122	89.889	1.00	31.44
753	CD2	HIS	A	100	-75.903	-7.254	91.085	1.00	28.82
754	C	HIS	A	100	-74.631	-4.605	94.904	1.00	29.88
755	O	HIS	A	100	-75.307	-3.893	95.644	1.00	29.96

FIGURE 30

A	B	C	D	E	F	G	H	I	J
756	N	SER	A	101	-73.516	-5.222	95.285	1.00	29.75
757	CA	SER	A	101	-73.077	-5.245	96.670	1.00	30.71
758	CB	SER	A	101	-72.126	-6.415	96.914	1.00	30.60
759	OG	SER	A	101	-70.964	-6.315	96.115	1.00	30.67
760	C	SER	A	101	-72.463	-3.951	97.192	1.00	31.43
761	O	SER	A	101	-71.795	-3.209	96.475	1.00	31.45
762	N	TYR	A	102	-72.729	-3.667	98.451	1.00	32.61
763	CA	TYR	A	102	-72.153	-2.489	99.073	1.00	34.02
764	CB	TYR	A	102	-72.795	-1.201	98.554	1.00	33.97
765	CG	TYR	A	102	-74.265	-1.034	98.891	1.00	34.51
766	CD1	TYR	A	102	-74.671	-0.554	100.132	1.00	34.44
767	CE1	TYR	A	102	-76.017	-0.393	100.436	1.00	34.19
768	CZ	TYR	A	102	-76.968	-0.688	99.482	1.00	36.01
769	OH	TYR	A	102	-78.312	-0.527	99.758	1.00	37.07
770	CE2	TYR	A	102	-76.590	-1.153	98.230	1.00	35.53
771	CD2	TYR	A	102	-75.247	-1.322	97.945	1.00	34.87
772	C	TYR	A	102	-72.281	-2.547	100.566	1.00	34.63
773	O	TYR	A	102	-72.993	-3.380	101.130	1.00	34.79
774	N	THR	A	103	-71.571	-1.640	101.200	1.00	35.57
775	CA	THR	A	103	-71.584	-1.535	102.632	1.00	36.51
776	CB	THR	A	103	-70.182	-1.745	103.149	1.00	36.49
777	OG1	THR	A	103	-70.038	-3.123	103.533	1.00	37.55
778	CG2	THR	A	103	-69.993	-0.988	104.434	1.00	37.30
779	C	THR	A	103	-72.088	-0.153	102.988	1.00	37.41
780	O	THR	A	103	-71.922	0.800	102.214	1.00	36.93
781	N	ALA	A	104	-72.696	-0.041	104.161	1.00	38.57
782	CA	ALA	A	104	-73.281	1.216	104.570	1.00	40.16
783	CB	ALA	A	104	-74.518	1.506	103.702	1.00	39.76
784	C	ALA	A	104	-73.661	1.229	106.054	1.00	41.38
785	O	ALA	A	104	-73.799	0.181	106.696	1.00	41.40
786	N	SER	A	105	-73.800	2.432	106.596	1.00	42.97
787	CA	SER	A	105	-74.254	2.611	107.967	1.00	44.31
788	CB	SER	A	105	-73.699	3.900	108.551	1.00	44.20
789	OG	SER	A	105	-72.328	3.796	108.864	1.00	44.43
790	C	SER	A	105	-75.769	2.709	107.928	1.00	45.32
791	O	SER	A	105	-76.356	3.008	106.886	1.00	45.47
792	N	TYR	A	106	-76.408	2.476	109.063	1.00	46.70
793	CA	TYR	A	106	-77.859	2.545	109.112	1.00	47.94
794	CB	TYR	A	106	-78.464	1.154	108.886	1.00	47.65
795	CG	TYR	A	106	-78.255	0.642	107.477	1.00	48.49
796	CD1	TYR	A	106	-77.163	-0.160	107.156	1.00	48.56
797	CE1	TYR	A	106	-76.959	-0.606	105.861	1.00	48.75
798	CZ	TYR	A	106	-77.854	-0.258	104.870	1.00	48.53
799	OH	TYR	A	106	-77.676	-0.696	103.583	1.00	47.41
800	CE2	TYR	A	106	-78.936	0.541	105.164	1.00	49.52
801	CD2	TYR	A	106	-79.130	0.989	106.461	1.00	48.40
802	C	TYR	A	106	-78.415	3.171	110.389	1.00	48.72
803	O	TYR	A	106	-77.926	2.932	111.488	1.00	49.04
804	N	ASP	A	107	-79.434	3.996	110.215	1.00	49.97
805	CA	ASP	A	107	-80.176	4.552	111.330	1.00	51.26
806	CB	ASP	A	107	-79.841	6.019	111.562	1.00	51.15

FIGURE 3P

A	B	C	D	E	F	G	H	I	J
807	CG	ASP	A	107	-78.522	6.198	112.262	1.00	51.39
808	OD1	ASP	A	107	-78.343	5.617	113.347	1.00	50.59
809	OD2	ASP	A	107	-77.593	6.879	111.793	1.00	52.74
810	C	ASP	A	107	-81.647	4.386	111.023	1.00	52.24
811	O	ASP	A	107	-82.090	4.631	109.895	1.00	52.43
812	N	ILE	A	108	-82.386	3.929	112.024	1.00	53.27
813	CA	ILE	A	108	-83.814	3.747	111.907	1.00	54.46
814	CB	ILE	A	108	-84.248	2.509	112.681	1.00	54.40
815	CG1	ILE	A	108	-83.414	1.300	112.263	1.00	54.06
816	CD1	ILE	A	108	-83.603	0.109	113.152	1.00	53.98
817	CG2	ILE	A	108	-85.731	2.262	112.466	1.00	54.24
818	C	ILE	A	108	-84.495	4.949	112.510	1.00	55.70
819	O	ILE	A	108	-84.175	5.358	113.625	1.00	56.05
820	N	TYR	A	109	-85.452	5.508	111.786	1.00	56.99
821	CA	TYR	A	109	-86.158	6.679	112.267	1.00	58.18
822	CB	TYR	A	109	-86.000	7.808	111.258	1.00	58.13
823	CG	TYR	A	109	-86.724	9.070	111.635	1.00	58.70
824	CD1	TYR	A	109	-86.180	9.951	112.551	1.00	58.38
825	CE1	TYR	A	109	-86.837	11.108	112.897	1.00	59.66
826	CZ	TYR	A	109	-88.056	11.399	112.323	1.00	60.37
827	OH	TYR	A	109	-88.707	12.557	112.673	1.00	61.64
828	CE2	TYR	A	109	-88.621	10.539	111.407	1.00	60.00
829	CD2	TYR	A	109	-87.956	9.381	111.071	1.00	59.25
830	C	TYR	A	109	-87.636	6.381	112.503	1.00	59.21
831	O	TYR	A	109	-88.353	5.994	111.578	1.00	59.31
832	N	ASP	A	110	-88.084	6.563	113.745	1.00	60.39
833	CA	ASP	A	110	-89.485	6.369	114.108	1.00	61.55
834	CB	ASP	A	110	-89.647	6.365	115.626	1.00	61.48
835	CG	ASP	A	110	-91.000	5.839	116.072	1.00	61.56
836	OD1	ASP	A	110	-92.038	6.409	115.667	1.00	61.84
837	OD2	ASP	A	110	-91.120	4.862	116.843	1.00	61.51
838	C	ASP	A	110	-90.313	7.494	113.509	1.00	62.57
839	O	ASP	A	110	-90.068	8.666	113.781	1.00	62.64
840	N	LEU	A	111	-91.298	7.132	112.699	1.00	63.95
841	CA	LEU	A	111	-92.101	8.117	111.991	1.00	65.62
842	CB	LEU	A	111	-92.821	7.452	110.816	1.00	65.53
843	CG	LEU	A	111	-91.945	7.211	109.587	1.00	65.20
844	CD1	LEU	A	111	-91.671	8.533	108.898	1.00	65.10
845	CD2	LEU	A	111	-92.590	6.243	108.625	1.00	64.19
846	C	LEU	A	111	-93.105	8.869	112.863	1.00	66.86
847	O	LEU	A	111	-93.350	10.061	112.649	1.00	67.09
848	N	ASN	A	112	-93.699	8.175	113.829	1.00	68.18
849	CA	ASN	A	112	-94.687	8.813	114.694	1.00	69.43
850	CB	ASN	A	112	-95.815	7.847	115.063	1.00	69.91
851	CG	ASN	A	112	-96.951	7.868	114.043	1.00	71.54
852	OD1	ASN	A	112	-97.853	8.716	114.111	1.00	73.34
853	ND2	ASN	A	112	-96.905	6.947	113.085	1.00	72.43
854	C	ASN	A	112	-94.074	9.498	115.917	1.00	69.67
855	O	ASN	A	112	-94.454	10.618	116.255	1.00	69.91
856	N	LYS	A	113	-93.130	8.834	116.576	1.00	69.67
857	CA	LYS	A	113	-92.411	9.467	117.666	1.00	69.79

FIGURE 3Q

A	B	C	D	E	F	G	H	I	J
858	CB	LYS	A	113	-91.581	8.445	118.432	1.00	69.92
859	CG	LYS	A	113	-92.323	7.474	119.317	1.00	71.09
860	CD	LYS	A	113	-91.307	6.839	120.266	1.00	73.31
861	CE	LYS	A	113	-91.738	5.475	120.779	1.00	74.59
862	NZ	LYS	A	113	-92.421	5.556	122.104	1.00	75.40
863	C	LYS	A	113	-91.429	10.414	116.999	1.00	69.62
864	O	LYS	A	113	-90.600	11.044	117.657	1.00	69.51
865	N	ARG	A	114	-91.531	10.490	115.676	1.00	69.50
866	CA	ARG	A	114	-90.529	11.161	114.843	1.00	69.30
867	CB	ARG	A	114	-91.101	12.337	114.026	1.00	69.52
868	CG	ARG	A	114	-91.369	13.633	114.748	1.00	70.06
869	CD	ARG	A	114	-91.489	14.829	113.791	1.00	71.10
870	NE	ARG	A	114	-92.790	14.901	113.115	1.00	71.72
871	CZ	ARG	A	114	-93.128	15.839	112.231	1.00	71.44
872	NH1	ARG	A	114	-94.333	15.827	111.677	1.00	71.11
873	NH2	ARG	A	114	-92.261	16.789	111.897	1.00	71.05
874	C	ARG	A	114	-89.199	11.453	115.552	1.00	68.86
875	O	ARG	A	114	-88.787	12.597	115.691	1.00	68.68
876	N	GLN	A	115	-88.545	10.390	116.011	1.00	68.59
877	CA	GLN	A	115	-87.224	10.501	116.619	1.00	68.27
878	CB	GLN	A	115	-87.286	10.587	118.152	1.00	68.48
879	CG	GLN	A	115	-87.726	9.325	118.890	1.00	68.71
880	CD	GLN	A	115	-88.312	9.644	120.261	1.00	68.76
881	OE1	GLN	A	115	-89.533	9.723	120.413	1.00	69.09
882	NE2	GLN	A	115	-87.448	9.843	121.250	1.00	67.97
883	C	GLN	A	115	-86.331	9.363	116.139	1.00	67.81
884	O	GLN	A	115	-86.814	8.327	115.682	1.00	68.07
885	N	LEU	A	116	-85.028	9.584	116.241	1.00	66.96
886	CA	LEU	A	116	-84.010	8.666	115.760	1.00	66.14
887	CB	LEU	A	116	-82.740	9.482	115.521	1.00	66.09
888	CG	LEU	A	116	-81.798	9.189	114.366	1.00	66.06
889	CD1	LEU	A	116	-80.787	10.318	114.260	1.00	66.19
890	CD2	LEU	A	116	-82.573	9.043	113.070	1.00	66.04
891	C	LEU	A	116	-83.713	7.592	116.798	1.00	65.84
892	O	LEU	A	116	-83.144	7.894	117.852	1.00	65.90
893	N	ILE	A	117	-84.085	6.344	116.527	1.00	65.02
894	CA	ILE	A	117	-83.763	5.293	117.482	1.00	64.46
895	CB	ILE	A	117	-84.102	3.901	116.942	1.00	64.31
896	CG1	ILE	A	117	-85.566	3.561	117.228	1.00	64.66
897	CD1	ILE	A	117	-86.567	4.342	116.400	1.00	64.28
898	CG2	ILE	A	117	-83.231	2.855	117.608	1.00	64.41
899	C	ILE	A	117	-82.280	5.405	117.794	1.00	64.18
900	O	ILE	A	117	-81.452	5.443	116.888	1.00	64.41
901	N	THR	A	118	-81.945	5.509	119.073	1.00	63.78
902	CA	THR	A	118	-80.549	5.628	119.469	1.00	63.43
903	CB	THR	A	118	-80.305	6.903	120.294	1.00	63.51
904	OG1	THR	A	118	-81.158	6.899	121.446	1.00	63.30
905	CG2	THR	A	118	-80.750	8.131	119.519	1.00	64.33
906	C	THR	A	118	-80.178	4.428	120.299	1.00	62.89
907	O	THR	A	118	-79.093	4.363	120.865	1.00	63.13
908	N	GLU	A	119	-81.095	3.483	120.404	1.00	62.19

FIGURE 3R

A	B	C	D	E	F	G	H	I	J
909	CA	GLU	A	119	-80.789	2.302	121.179	1.00	61.90
910	CB	GLU	A	119	-81.876	1.988	122.212	1.00	62.16
911	CG	GLU	A	119	-83.295	2.021	121.682	1.00	63.42
912	CD	GLU	A	119	-84.097	3.175	122.249	1.00	64.70
913	OE1	GLU	A	119	-85.216	2.925	122.752	1.00	65.29
914	OE2	GLU	A	119	-83.603	4.322	122.200	1.00	65.47
915	C	GLU	A	119	-80.553	1.116	120.270	1.00	61.26
916	O	GLU	A	119	-81.336	0.833	119.358	1.00	61.12
917	N	GLU	A	120	-79.435	0.451	120.508	1.00	60.35
918	CA	GLU	A	120	-79.112	-0.751	119.782	1.00	59.58
919	CB	GLU	A	120	-80.038	-1.855	120.236	1.00	59.80
920	CG	GLU	A	120	-79.656	-2.395	121.592	1.00	60.94
921	CD	GLU	A	120	-79.723	-3.888	121.581	1.00	62.51
922	OE1	GLU	A	120	-80.436	-4.398	120.697	1.00	62.86
923	OE2	GLU	A	120	-79.059	-4.541	122.413	1.00	64.11
924	C	GLU	A	120	-79.213	-0.567	118.280	1.00	58.60
925	O	GLU	A	120	-80.009	-1.223	117.607	1.00	58.51
926	N	ARG	A	121	-78.380	0.325	117.764	1.00	57.22
927	CA	ARG	A	121	-78.379	0.646	116.351	1.00	55.90
928	CB	ARG	A	121	-77.564	1.925	116.127	1.00	56.41
929	CG	ARG	A	121	-78.211	3.159	116.755	1.00	58.26
930	CD	ARG	A	121	-77.247	4.271	117.158	1.00	62.15
931	NE	ARG	A	121	-76.774	5.071	116.030	1.00	64.53
932	CZ	ARG	A	121	-75.558	5.604	115.961	1.00	66.45
933	NH1	ARG	A	121	-74.695	5.414	116.955	1.00	66.14
934	NH2	ARG	A	121	-75.201	6.323	114.901	1.00	67.16
935	C	ARG	A	121	-77.839	-0.499	115.494	1.00	54.28
936	O	ARG	A	121	-77.194	-1.427	115.988	1.00	53.50
937	N	ILE	A	122	-78.151	-0.437	114.206	1.00	52.62
938	CA	ILE	A	122	-77.596	-1.363	113.237	1.00	50.94
939	CB	ILE	A	122	-78.290	-1.160	111.893	1.00	50.64
940	CG1	ILE	A	122	-79.765	-1.551	112.013	1.00	50.60
941	CD1	ILE	A	122	-80.633	-1.119	110.847	1.00	49.17
942	CG2	ILE	A	122	-77.612	-1.969	110.811	1.00	50.97
943	C	ILE	A	122	-76.106	-1.026	113.159	1.00	50.01
944	O	ILE	A	122	-75.733	0.152	113.129	1.00	49.67
945	N	PRO	A	123	-75.251	-2.043	113.163	1.00	49.10
946	CA	PRO	A	123	-73.802	-1.814	113.145	1.00	48.58
947	CB	PRO	A	123	-73.216	-3.227	113.096	1.00	48.45
948	CG	PRO	A	123	-74.298	-4.112	113.584	1.00	48.91
949	CD	PRO	A	123	-75.591	-3.473	113.188	1.00	48.92
950	C	PRO	A	123	-73.356	-1.044	111.922	1.00	48.24
951	O	PRO	A	123	-74.093	-0.916	110.936	1.00	47.98
952	N	ASN	A	124	-72.146	-0.507	111.994	1.00	48.07
953	CA	ASN	A	124	-71.560	0.145	110.831	1.00	47.49
954	CB	ASN	A	124	-70.366	1.008	111.239	1.00	47.79
955	CG	ASN	A	124	-70.770	2.223	112.062	1.00	49.27
956	OD1	ASN	A	124	-71.831	2.812	111.845	1.00	50.29
957	ND2	ASN	A	124	-69.912	2.614	113.004	1.00	49.78
958	C	ASN	A	124	-71.092	-0.982	109.924	1.00	46.23
959	O	ASN	A	124	-70.885	-2.101	110.389	1.00	45.94

FIGURE 3S

A	B	C	D	E	F	G	H	I	J
960	N	ASN	A	125	-70.917	-0.698	108.640	1.00	45.11
961	CA	ASN	A	125	-70.441	-1.722	107.723	1.00	44.23
962	CB	ASN	A	125	-69.043	-2.183	108.135	1.00	44.07
963	CG	ASN	A	125	-68.077	-1.040	108.229	1.00	43.99
964	OD1	ASN	A	125	-67.545	-0.763	109.292	1.00	45.19
965	ND2	ASN	A	125	-67.855	-0.353	107.115	1.00	43.79
966	C	ASN	A	125	-71.376	-2.927	107.635	1.00	43.28
967	O	ASN	A	125	-70.931	-4.071	107.510	1.00	43.08
968	N	THR	A	126	-72.670	-2.658	107.736	1.00	42.12
969	CA	THR	A	126	-73.668	-3.691	107.597	1.00	41.08
970	CB	THR	A	126	-75.019	-3.208	108.126	1.00	41.17
971	OG1	THR	A	126	-74.984	-3.203	109.559	1.00	41.92
972	CG2	THR	A	126	-76.101	-4.228	107.820	1.00	41.52
973	C	THR	A	126	-73.713	-3.966	106.111	1.00	39.94
974	O	THR	A	126	-73.741	-3.041	105.301	1.00	39.39
975	N	GLN	A	127	-73.669	-5.245	105.763	1.00	39.17
976	CA	GLN	A	127	-73.550	-5.662	104.375	1.00	38.23
977	CB	GLN	A	127	-72.940	-7.054	104.312	1.00	37.88
978	CG	GLN	A	127	-71.446	-7.014	104.569	1.00	36.17
979	CD	GLN	A	127	-70.908	-8.312	105.078	1.00	33.91
980	OE1	GLN	A	127	-69.921	-8.823	104.552	1.00	34.78
981	NE2	GLN	A	127	-71.555	-8.866	106.093	1.00	31.99
982	C	GLN	A	127	-74.851	-5.567	103.624	1.00	38.42
983	O	GLN	A	127	-74.865	-5.372	102.419	1.00	38.49
984	N	TRP	A	128	-75.953	-5.672	104.347	1.00	38.80
985	CA	TRP	A	128	-77.253	-5.597	103.716	1.00	39.06
986	CB	TRP	A	128	-77.407	-6.733	102.704	1.00	39.48
987	CG	TRP	A	128	-78.784	-6.870	102.181	1.00	40.32
988	CD1	TRP	A	128	-79.787	-7.620	102.714	1.00	42.04
989	NE1	TRP	A	128	-80.930	-7.482	101.963	1.00	43.55
990	CE2	TRP	A	128	-80.672	-6.636	100.917	1.00	42.36
991	CD2	TRP	A	128	-79.328	-6.231	101.026	1.00	41.21
992	CE3	TRP	A	128	-78.815	-5.355	100.068	1.00	42.04
993	CZ3	TRP	A	128	-79.635	-4.924	99.054	1.00	42.24
994	CH2	TRP	A	128	-80.968	-5.348	98.973	1.00	44.12
995	CZ2	TRP	A	128	-81.502	-6.206	99.893	1.00	42.48
996	C	TRP	A	128	-78.340	-5.668	104.763	1.00	39.04
997	O	TRP	A	128	-78.176	-6.312	105.797	1.00	39.07
998	N	VAL	A	129	-79.449	-4.993	104.501	1.00	39.22
999	CA	VAL	A	129	-80.573	-5.012	105.421	1.00	39.73
1000	CB	VAL	A	129	-80.561	-3.768	106.370	1.00	39.67
1001	CG1	VAL	A	129	-81.267	-2.598	105.736	1.00	39.95
1002	CG2	VAL	A	129	-79.147	-3.363	106.726	1.00	39.92
1003	C	VAL	A	129	-81.874	-4.996	104.638	1.00	39.96
1004	O	VAL	A	129	-81.929	-4.494	103.519	1.00	39.45
1005	N	THR	A	130	-82.931	-5.545	105.218	1.00	40.74
1006	CA	THR	A	130	-84.229	-5.427	104.584	1.00	41.45
1007	CB	THR	A	130	-84.362	-6.373	103.381	1.00	41.93
1008	OG1	THR	A	130	-85.650	-6.188	102.773	1.00	43.29
1009	CG2	THR	A	130	-84.389	-7.832	103.834	1.00	41.38
1010	C	THR	A	130	-85.395	-5.615	105.543	1.00	41.98



FIGURE 3T

A	B	C	D	E	F	G	H	I	J
1011	O	THR	A	130	-85.339	-6.402	106.496	1.00	41.50
1012	N	TRP	A	131	-86.459	-4.872	105.270	1.00	42.53
1013	CA	TRP	A	131	-87.679	-4.980	106.034	1.00	43.30
1014	CB	TRP	A	131	-88.609	-3.829	105.675	1.00	43.34
1015	CG	TRP	A	131	-88.116	-2.480	106.045	1.00	43.96
1016	CD1	TRP	A	131	-87.760	-1.485	105.192	1.00	43.49
1017	NE1	TRP	A	131	-87.378	-0.370	105.897	1.00	43.73
1018	CE2	TRP	A	131	-87.505	-0.624	107.237	1.00	44.47
1019	CD2	TRP	A	131	-87.969	-1.948	107.367	1.00	44.17
1020	CE3	TRP	A	131	-88.190	-2.455	108.652	1.00	45.01
1021	CZ3	TRP	A	131	-87.926	-1.639	109.752	1.00	45.89
1022	CH2	TRP	A	131	-87.454	-0.328	109.586	1.00	44.65
1023	CZ2	TRP	A	131	-87.240	0.198	108.343	1.00	44.48
1024	C	TRP	A	131	-88.390	-6.275	105.670	1.00	43.74
1025	O	TRP	A	131	-88.285	-6.757	104.544	1.00	44.08
1026	N	SER	A	132	-89.120	-6.837	106.621	1.00	44.16
1027	CA	SER	A	132	-89.949	-7.983	106.335	1.00	44.80
1028	CB	SER	A	132	-90.532	-8.510	107.636	1.00	45.09
1029	OG	SER	A	132	-90.894	-7.434	108.493	1.00	46.47
1030	C	SER	A	132	-91.033	-7.442	105.411	1.00	44.95
1031	O	SER	A	132	-91.272	-6.243	105.413	1.00	45.46
1032	N	PRO	A	133	-91.696	-8.294	104.633	1.00	45.04
1033	CA	PRO	A	133	-92.699	-7.830	103.660	1.00	45.04
1034	CB	PRO	A	133	-93.123	-9.112	102.930	1.00	44.91
1035	CG	PRO	A	133	-92.109	-10.135	103.279	1.00	45.39
1036	CD	PRO	A	133	-91.569	-9.759	104.643	1.00	45.43
1037	C	PRO	A	133	-93.913	-7.165	104.314	1.00	45.29
1038	O	PRO	A	133	-94.553	-6.316	103.699	1.00	45.33
1039	N	VAL	A	134	-94.253	-7.565	105.533	1.00	45.55
1040	CA	VAL	A	134	-95.300	-6.868	106.271	1.00	45.72
1041	CB	VAL	A	134	-96.563	-7.734	106.505	1.00	45.84
1042	CG1	VAL	A	134	-96.933	-8.533	105.245	1.00	46.77
1043	CG2	VAL	A	134	-96.358	-8.668	107.670	1.00	46.13
1044	C	VAL	A	134	-94.701	-6.474	107.606	1.00	45.52
1045	O	VAL	A	134	-93.721	-7.075	108.034	1.00	45.73
1046	N	GLY	A	135	-95.263	-5.455	108.251	1.00	45.50
1047	CA	GLY	A	135	-94.810	-5.049	109.569	1.00	45.25
1048	C	GLY	A	135	-93.524	-4.252	109.564	1.00	45.44
1049	O	GLY	A	135	-93.297	-3.438	108.673	1.00	45.45
1050	N	HIS	A	136	-92.680	-4.471	110.568	1.00	45.65
1051	CA	HIS	A	136	-91.403	-3.758	110.635	1.00	45.56
1052	CB	HIS	A	136	-91.539	-2.444	111.416	1.00	45.75
1053	CG	HIS	A	136	-92.231	-2.597	112.735	1.00	47.21
1054	ND1	HIS	A	136	-93.566	-2.303	112.912	1.00	47.51
1055	CE1	HIS	A	136	-93.903	-2.538	114.168	1.00	48.81
1056	NE2	HIS	A	136	-92.835	-2.981	114.811	1.00	48.63
1057	CD2	HIS	A	136	-91.776	-3.030	113.936	1.00	47.97
1058	C	HIS	A	136	-90.253	-4.600	111.190	1.00	44.87
1059	O	HIS	A	136	-89.287	-4.065	111.725	1.00	44.84
1060	N	LYS	A	137	-90.356	-5.915	111.073	1.00	44.39
1061	CA	LYS	A	137	-89.218	-6.752	111.427	1.00	44.14

FIGURE 3U

A	B	C	D	E	F	G	H	I	J
1062	CB	LYS	A	137	-89.525	-8.234	111.221	1.00	44.38
1063	CG	LYS	A	137	-90.517	-8.825	112.212	1.00	45.40
1064	CD	LYS	A	137	-90.881	-10.260	111.834	1.00	46.13
1065	CE	LYS	A	137	-91.885	-10.860	112.803	1.00	47.44
1066	NZ	LYS	A	137	-92.536	-12.087	112.238	1.00	47.73
1067	C	LYS	A	137	-88.063	-6.341	110.522	1.00	43.33
1068	O	LYS	A	137	-88.275	-5.833	109.416	1.00	43.23
1069	N	LEU	A	138	-86.840	-6.568	110.979	1.00	42.68
1070	CA	LEU	A	138	-85.671	-6.153	110.218	1.00	41.52
1071	CB	LEU	A	138	-85.018	-4.982	110.930	1.00	41.84
1072	CG	LEU	A	138	-84.322	-3.909	110.108	1.00	42.22
1073	CD1	LEU	A	138	-85.154	-3.506	108.898	1.00	42.38
1074	CD2	LEU	A	138	-84.088	-2.720	111.016	1.00	42.71
1075	C	LEU	A	138	-84.677	-7.280	110.134	1.00	40.47
1076	O	LEU	A	138	-84.405	-7.932	111.138	1.00	41.40
1077	N	ALA	A	139	-84.143	-7.528	108.944	1.00	38.83
1078	CA	ALA	A	139	-83.103	-8.541	108.774	1.00	37.16
1079	CB	ALA	A	139	-83.601	-9.692	107.920	1.00	37.29
1080	C	ALA	A	139	-81.885	-7.898	108.139	1.00	36.17
1081	O	ALA	A	139	-82.000	-7.164	107.156	1.00	35.70
1082	N	TYR	A	140	-80.715	-8.129	108.709	1.00	35.24
1083	CA	TYR	A	140	-79.522	-7.555	108.115	1.00	35.08
1084	CB	TYR	A	140	-79.210	-6.175	108.690	1.00	35.34
1085	CG	TYR	A	140	-78.885	-6.181	110.155	1.00	37.69
1086	CD1	TYR	A	140	-77.596	-6.445	110.597	1.00	38.79
1087	CE1	TYR	A	140	-77.286	-6.450	111.949	1.00	40.18
1088	CZ	TYR	A	140	-78.272	-6.182	112.876	1.00	41.32
1089	OH	TYR	A	140	-77.963	-6.193	114.222	1.00	42.58
1090	CE2	TYR	A	140	-79.561	-5.908	112.462	1.00	40.81
1091	CD2	TYR	A	140	-79.863	-5.906	111.103	1.00	39.64
1092	C	TYR	A	140	-78.356	-8.485	108.275	1.00	34.37
1093	O	TYR	A	140	-78.386	-9.395	109.102	1.00	34.18
1094	N	VAL	A	141	-77.334	-8.257	107.458	1.00	34.13
1095	CA	VAL	A	141	-76.134	-9.082	107.468	1.00	33.48
1096	CB	VAL	A	141	-75.896	-9.751	106.106	1.00	33.42
1097	CG1	VAL	A	141	-77.211	-10.262	105.541	1.00	31.77
1098	CG2	VAL	A	141	-74.877	-10.893	106.245	1.00	32.42
1099	C	VAL	A	141	-74.947	-8.226	107.804	1.00	33.83
1100	O	VAL	A	141	-74.775	-7.150	107.251	1.00	33.33
1101	N	TRP	A	142	-74.117	-8.713	108.716	1.00	34.55
1102	CA	TRP	A	142	-72.984	-7.935	109.170	1.00	35.09
1103	CB	TRP	A	142	-73.376	-7.128	110.417	1.00	35.47
1104	CG	TRP	A	142	-72.236	-6.359	110.983	1.00	35.69
1105	CD1	TRP	A	142	-71.680	-5.237	110.472	1.00	36.60
1106	NE1	TRP	A	142	-70.639	-4.817	111.262	1.00	38.27
1107	CE2	TRP	A	142	-70.502	-5.694	112.307	1.00	38.61
1108	CD2	TRP	A	142	-71.494	-6.675	112.160	1.00	38.36
1109	CE3	TRP	A	142	-71.574	-7.691	113.118	1.00	40.02
1110	CZ3	TRP	A	142	-70.677	-7.690	114.170	1.00	40.38
1111	CH2	TRP	A	142	-69.704	-6.702	114.284	1.00	40.24
1112	CZ2	TRP	A	142	-69.602	-5.693	113.367	1.00	39.52

FIGURE 3V

A	B	C	D	E	F	G	H	I	J
1113	C	TRP	A	142	-71.855	-8.883	109.483	1.00	35.15
1114	O	TRP	A	142	-72.018	-9.831	110.256	1.00	35.26
1115	N	ASN	A	143	-70.696	-8.626	108.904	1.00	35.50
1116	CA	ASN	A	143	-69.592	-9.572	109.029	1.00	35.74
1117	CB	ASN	A	143	-69.051	-9.634	110.454	1.00	36.25
1118	CG	ASN	A	143	-68.152	-8.455	110.785	1.00	38.65
1119	OD1	ASN	A	143	-67.501	-8.428	111.833	1.00	42.03
1120	ND2	ASN	A	143	-68.117	-7.471	109.896	1.00	40.07
1121	C	ASN	A	143	-70.033	-10.954	108.566	1.00	35.13
1122	O	ASN	A	143	-69.748	-11.944	109.206	1.00	35.06
1123	N	ASN	A	144	-70.750	-11.001	107.448	1.00	34.94
1124	CA	ASN	A	144	-71.161	-12.263	106.866	1.00	34.63
1125	CB	ASN	A	144	-69.933	-13.086	106.519	1.00	34.01
1126	CG	ASN	A	144	-69.222	-12.572	105.289	1.00	35.19
1127	OD1	ASN	A	144	-68.829	-13.363	104.432	1.00	36.37
1128	ND2	ASN	A	144	-69.058	-11.243	105.182	1.00	32.83
1129	C	ASN	A	144	-72.122	-13.065	107.732	1.00	34.70
1130	O	ASN	A	144	-72.353	-14.247	107.491	1.00	34.50
1131	N	ASP	A	145	-72.673	-12.434	108.754	1.00	34.98
1132	CA	ASP	A	145	-73.681	-13.107	109.555	1.00	35.75
1133	CB	ASP	A	145	-73.203	-13.327	110.979	1.00	35.92
1134	CG	ASP	A	145	-72.385	-14.559	111.098	1.00	35.82
1135	OD1	ASP	A	145	-71.412	-14.583	111.889	1.00	36.17
1136	OD2	ASP	A	145	-72.652	-15.564	110.409	1.00	36.92
1137	C	ASP	A	145	-75.016	-12.394	109.516	1.00	36.02
1138	O	ASP	A	145	-75.081	-11.178	109.378	1.00	36.11
1139	N	ILE	A	146	-76.085	-13.170	109.600	1.00	36.79
1140	CA	ILE	A	146	-77.428	-12.627	109.525	1.00	37.78
1141	CB	ILE	A	146	-78.338	-13.631	108.844	1.00	37.37
1142	CG1	ILE	A	146	-79.711	-13.033	108.630	1.00	37.36
1143	CD1	ILE	A	146	-80.724	-13.594	109.517	1.00	36.92
1144	CG2	ILE	A	146	-78.474	-14.842	109.711	1.00	38.98
1145	C	ILE	A	146	-77.977	-12.280	110.903	1.00	38.75
1146	O	ILE	A	146	-77.698	-12.958	111.885	1.00	38.28
1147	N	TYR	A	147	-78.766	-11.213	110.960	1.00	40.52
1148	CA	TYR	A	147	-79.319	-10.724	112.215	1.00	42.14
1149	CB	TYR	A	147	-78.543	-9.492	112.673	1.00	42.05
1150	CG	TYR	A	147	-77.167	-9.807	113.182	1.00	42.83
1151	CD1	TYR	A	147	-76.996	-10.422	114.421	1.00	42.89
1152	CE1	TYR	A	147	-75.741	-10.711	114.909	1.00	42.52
1153	CZ	TYR	A	147	-74.634	-10.393	114.161	1.00	42.62
1154	OH	TYR	A	147	-73.397	-10.697	114.656	1.00	41.49
1155	CE2	TYR	A	147	-74.772	-9.784	112.916	1.00	42.72
1156	CD2	TYR	A	147	-76.035	-9.492	112.438	1.00	42.13
1157	C	TYR	A	147	-80.768	-10.329	112.039	1.00	42.99
1158	O	TYR	A	147	-81.113	-9.685	111.052	1.00	42.95
1159	N	VAL	A	148	-81.606	-10.688	113.011	1.00	44.06
1160	CA	VAL	A	148	-83.022	-10.338	112.944	1.00	45.14
1161	CB	VAL	A	148	-83.903	-11.584	112.949	1.00	45.03
1162	CG1	VAL	A	148	-85.360	-11.205	113.031	1.00	45.30
1163	CG2	VAL	A	148	-83.637	-12.414	111.698	1.00	45.09

FIGURE 3W

A	B	C	D	E	F	G	H	I	J
1164	C	VAL	A	148	-83.429	-9.390	114.073	1.00	46.07
1165	O	VAL	A	148	-83.252	-9.689	115.258	1.00	46.32
1166	N	LYS	A	149	-83.957	-8.233	113.690	1.00	47.01
1167	CA	LYS	A	149	-84.401	-7.228	114.645	1.00	47.78
1168	CB	LYS	A	149	-83.814	-5.867	114.271	1.00	47.98
1169	CG	LYS	A	149	-83.796	-4.834	115.386	1.00	48.59
1170	CD	LYS	A	149	-83.370	-3.461	114.882	1.00	48.37
1171	CE	LYS	A	149	-81.886	-3.244	115.044	1.00	48.67
1172	NZ	LYS	A	149	-81.544	-3.000	116.472	1.00	50.63
1173	C	LYS	A	149	-85.925	-7.200	114.613	1.00	48.43
1174	O	LYS	A	149	-86.530	-6.861	113.594	1.00	48.72
1175	N	ILE	A	150	-86.544	-7.578	115.727	1.00	49.09
1176	CA	ILE	A	150	-88.001	-7.667	115.830	1.00	49.77
1177	CB	ILE	A	150	-88.382	-8.423	117.097	1.00	50.25
1178	CG1	ILE	A	150	-87.736	-7.754	118.326	1.00	51.20
1179	CD1	ILE	A	150	-86.195	-7.767	118.325	1.00	51.77
1180	CG2	ILE	A	150	-87.976	-9.892	116.978	1.00	50.25
1181	C	ILE	A	150	-88.671	-6.312	115.862	1.00	49.79
1182	O	ILE	A	150	-89.735	-6.119	115.283	1.00	49.84
1183	N	GLU	A	151	-88.046	-5.390	116.577	1.00	50.04
1184	CA	GLU	A	151	-88.513	-4.023	116.697	1.00	50.13
1185	CB	GLU	A	151	-89.149	-3.780	118.071	1.00	50.27
1186	CG	GLU	A	151	-90.371	-4.640	118.362	1.00	49.88
1187	CD	GLU	A	151	-91.618	-4.118	117.678	1.00	49.38
1188	OE1	GLU	A	151	-91.578	-2.989	117.156	1.00	48.43
1189	OE2	GLU	A	151	-92.644	-4.827	117.676	1.00	49.86
1190	C	GLU	A	151	-87.254	-3.202	116.564	1.00	50.33
1191	O	GLU	A	151	-86.206	-3.577	117.077	1.00	50.83
1192	N	PRO	A	152	-87.341	-2.097	115.853	1.00	50.40
1193	CA	PRO	A	152	-86.184	-1.246	115.624	1.00	50.75
1194	CB	PRO	A	152	-86.816	0.029	115.089	1.00	50.38
1195	CG	PRO	A	152	-87.986	-0.456	114.360	1.00	50.14
1196	CD	PRO	A	152	-88.545	-1.586	115.181	1.00	50.32
1197	C	PRO	A	152	-85.340	-0.953	116.859	1.00	51.47
1198	O	PRO	A	152	-84.134	-0.773	116.705	1.00	51.55
1199	N	ASN	A	153	-85.933	-0.918	118.052	1.00	52.26
1200	CA	ASN	A	153	-85.167	-0.520	119.237	1.00	53.02
1201	CB	ASN	A	153	-85.897	0.580	120.019	1.00	53.29
1202	CG	ASN	A	153	-87.350	0.223	120.327	1.00	54.92
1203	OD1	ASN	A	153	-88.248	1.060	120.183	1.00	56.44
1204	ND2	ASN	A	153	-87.589	-1.019	120.753	1.00	55.59
1205	C	ASN	A	153	-84.745	-1.637	120.175	1.00	53.24
1206	O	ASN	A	153	-84.162	-1.387	121.234	1.00	53.24
1207	N	LEU	A	154	-85.026	-2.873	119.784	1.00	53.27
1208	CA	LEU	A	154	-84.684	-4.013	120.619	1.00	53.55
1209	CB	LEU	A	154	-85.835	-5.017	120.614	1.00	53.63
1210	CG	LEU	A	154	-87.104	-4.552	121.334	1.00	55.32
1211	CD1	LEU	A	154	-88.244	-5.555	121.183	1.00	56.83
1212	CD2	LEU	A	154	-86.812	-4.308	122.813	1.00	56.74
1213	C	LEU	A	154	-83.387	-4.689	120.181	1.00	53.55
1214	O	LEU	A	154	-82.923	-4.518	119.049	1.00	53.67

FIGURE 3X

A	B	C	D	E	F	G	H	I	J
1215	N	PRO	A	155	-82.770	-5.433	121.088	1.00	53.45
1216	CA	PRO	A	155	-81.600	-6.227	120.719	1.00	53.26
1217	CB	PRO	A	155	-81.416	-7.150	121.928	1.00	53.35
1218	CG	PRO	A	155	-82.698	-6.991	122.707	1.00	53.64
1219	CD	PRO	A	155	-83.076	-5.551	122.521	1.00	53.41
1220	C	PRO	A	155	-81.952	-7.036	119.483	1.00	52.99
1221	O	PRO	A	155	-83.128	-7.328	119.260	1.00	53.22
1222	N	SER	A	156	-80.964	-7.378	118.673	1.00	52.22
1223	CA	SER	A	156	-81.253	-8.170	117.498	1.00	51.46
1224	CB	SER	A	156	-80.487	-7.649	116.283	1.00	51.35
1225	OG	SER	A	156	-79.093	-7.686	116.501	1.00	51.78
1226	C	SER	A	156	-80.888	-9.603	117.802	1.00	51.06
1227	O	SER	A	156	-80.056	-9.871	118.665	1.00	51.10
1228	N	TYR	A	157	-81.536	-10.530	117.116	1.00	50.44
1229	CA	TYR	A	157	-81.215	-11.924	117.298	1.00	50.17
1230	CB	TYR	A	157	-82.462	-12.773	117.148	1.00	50.52
1231	CG	TYR	A	157	-83.544	-12.452	118.145	1.00	51.11
1232	CD1	TYR	A	157	-83.633	-13.140	119.352	1.00	52.56
1233	CE1	TYR	A	157	-84.636	-12.856	120.259	1.00	53.17
1234	CZ	TYR	A	157	-85.561	-11.867	119.964	1.00	53.50
1235	OH	TYR	A	157	-86.574	-11.553	120.858	1.00	52.91
1236	CE2	TYR	A	157	-85.479	-11.182	118.768	1.00	52.57
1237	CD2	TYR	A	157	-84.484	-11.474	117.876	1.00	51.02
1238	C	TYR	A	157	-80.185	-12.321	116.258	1.00	49.68
1239	O	TYR	A	157	-80.292	-11.948	115.089	1.00	50.00
1240	N	ARG	A	158	-79.183	-13.070	116.694	1.00	48.95
1241	CA	ARG	A	158	-78.107	-13.512	115.824	1.00	48.21
1242	CB	ARG	A	158	-76.844	-13.680	116.663	1.00	48.35
1243	CG	ARG	A	158	-75.588	-13.015	116.132	1.00	49.45
1244	CD	ARG	A	158	-74.655	-13.936	115.375	1.00	51.05
1245	NE	ARG	A	158	-73.256	-13.578	115.577	1.00	52.28
1246	CZ	ARG	A	158	-72.238	-14.324	115.177	1.00	52.78
1247	NH1	ARG	A	158	-72.468	-15.459	114.543	1.00	53.84
1248	NH2	ARG	A	158	-70.992	-13.941	115.402	1.00	52.41
1249	C	ARG	A	158	-78.518	-14.870	115.261	1.00	47.44
1250	O	ARG	A	158	-78.593	-15.854	116.005	1.00	47.08
1251	N	ILE	A	159	-78.798	-14.938	113.961	1.00	46.07
1252	CA	ILE	A	159	-79.180	-16.224	113.376	1.00	44.90
1253	CB	ILE	A	159	-80.110	-16.066	112.158	1.00	45.17
1254	CG1	ILE	A	159	-81.435	-15.453	112.585	1.00	46.03
1255	CD1	ILE	A	159	-81.317	-14.038	113.009	1.00	47.93
1256	CG2	ILE	A	159	-80.395	-17.423	111.531	1.00	44.66
1257	C	ILE	A	159	-78.000	-17.117	113.031	1.00	43.77
1258	O	ILE	A	159	-78.067	-18.313	113.256	1.00	43.48
1259	N	THR	A	160	-76.917	-16.555	112.497	1.00	42.82
1260	CA	THR	A	160	-75.777	-17.395	112.119	1.00	41.89
1261	CB	THR	A	160	-75.548	-17.427	110.570	1.00	41.94
1262	OG1	THR	A	160	-75.171	-16.126	110.080	1.00	40.16
1263	CG2	THR	A	160	-76.847	-17.747	109.846	1.00	41.17
1264	C	THR	A	160	-74.494	-17.034	112.825	1.00	42.02
1265	O	THR	A	160	-74.229	-15.873	113.123	1.00	41.74

FIGURE 3Y

A	B	C	D	E	F	G	H	I	J
1266	N	TRP	A	161	-73.685	-18.049	113.070	1.00	42.13
1267	CA	TRP	A	161	-72.431	-17.864	113.757	1.00	42.46
1268	CB	TRP	A	161	-72.458	-18.640	115.066	1.00	42.91
1269	CG	TRP	A	161	-73.561	-18.191	115.971	1.00	44.48
1270	CD1	TRP	A	161	-74.871	-18.537	115.890	1.00	44.57
1271	NE1	TRP	A	161	-75.586	-17.916	116.885	1.00	46.73
1272	CE2	TRP	A	161	-74.736	-17.139	117.628	1.00	46.56
1273	CD2	TRP	A	161	-73.451	-17.286	117.077	1.00	45.80
1274	CE3	TRP	A	161	-72.389	-16.594	117.667	1.00	47.87
1275	CZ3	TRP	A	161	-72.643	-15.789	118.782	1.00	49.17
1276	CH2	TRP	A	161	-73.938	-15.665	119.301	1.00	48.33
1277	CZ2	TRP	A	161	-74.993	-16.332	118.740	1.00	47.92
1278	C	TRP	A	161	-71.286	-18.347	112.890	1.00	42.59
1279	O	TRP	A	161	-70.146	-18.424	113.348	1.00	42.82
1280	N	THR	A	162	-71.579	-18.648	111.628	1.00	42.13
1281	CA	THR	A	162	-70.557	-19.189	110.741	1.00	42.09
1282	CB	THR	A	162	-71.126	-20.358	109.952	1.00	42.15
1283	OG1	THR	A	162	-72.351	-19.961	109.317	1.00	41.11
1284	CG2	THR	A	162	-71.548	-21.460	110.933	1.00	41.82
1285	C	THR	A	162	-69.919	-18.173	109.806	1.00	42.26
1286	O	THR	A	162	-68.869	-18.436	109.230	1.00	42.12
1287	N	GLY	A	163	-70.537	-17.006	109.672	1.00	42.24
1288	CA	GLY	A	163	-69.990	-15.978	108.806	1.00	42.31
1289	C	GLY	A	163	-68.489	-15.837	108.924	1.00	42.51
1290	O	GLY	A	163	-67.924	-15.969	110.006	1.00	42.49
1291	N	LYS	A	164	-67.834	-15.565	107.802	1.00	42.68
1292	CA	LYS	A	164	-66.386	-15.370	107.790	1.00	42.76
1293	CB	LYS	A	164	-65.663	-16.688	108.049	1.00	42.94
1294	CG	LYS	A	164	-64.159	-16.547	108.226	1.00	44.49
1295	CD	LYS	A	164	-63.494	-17.917	108.351	1.00	46.77
1296	CE	LYS	A	164	-61.994	-17.787	108.548	1.00	49.88
1297	NZ	LYS	A	164	-61.363	-19.118	108.757	1.00	51.18
1298	C	LYS	A	164	-65.932	-14.762	106.464	1.00	42.70
1299	O	LYS	A	164	-66.209	-15.307	105.383	1.00	42.37
1300	N	GLU	A	165	-65.232	-13.635	106.560	1.00	42.30
1301	CA	GLU	A	165	-64.758	-12.920	105.387	1.00	42.55
1302	CB	GLU	A	165	-63.728	-11.860	105.775	1.00	43.00
1303	CG	GLU	A	165	-63.508	-10.805	104.693	1.00	47.10
1304	CD	GLU	A	165	-63.223	-9.423	105.267	1.00	51.85
1305	OE1	GLU	A	165	-62.996	-9.330	106.500	1.00	53.85
1306	OE2	GLU	A	165	-63.240	-8.431	104.492	1.00	52.18
1307	C	GLU	A	165	-64.212	-13.844	104.289	1.00	41.45
1308	O	GLU	A	165	-63.462	-14.780	104.562	1.00	41.15
1309	N	ASN	A	166	-64.638	-13.582	103.055	1.00	40.25
1310	CA	ASN	A	166	-64.195	-14.322	101.869	1.00	39.54
1311	CB	ASN	A	166	-62.725	-14.021	101.543	1.00	39.34
1312	CG	ASN	A	166	-62.453	-12.559	101.326	1.00	39.10
1313	OD1	ASN	A	166	-63.322	-11.806	100.916	1.00	38.31
1314	ND2	ASN	A	166	-61.224	-12.144	101.610	1.00	40.88
1315	C	ASN	A	166	-64.339	-15.836	101.932	1.00	39.07
1316	O	ASN	A	166	-63.831	-16.536	101.052	1.00	39.78

FIGURE 3Z

A	B	C	D	E	F	G	H	I	J
1317	N	ILE	A	167	-64.993	-16.358	102.960	1.00	38.18
1318	CA	ILE	A	167	-65.041	-17.803	103.129	1.00	37.29
1319	CB	ILE	A	167	-64.205	-18.247	104.321	1.00	37.48
1320	CG1	ILE	A	167	-62.734	-18.297	103.934	1.00	38.20
1321	CD1	ILE	A	167	-62.063	-16.953	103.935	1.00	41.85
1322	CG2	ILE	A	167	-64.622	-19.638	104.744	1.00	37.49
1323	C	ILE	A	167	-66.441	-18.335	103.276	1.00	36.51
1324	O	ILE	A	167	-66.846	-19.231	102.536	1.00	36.19
1325	N	ILE	A	168	-67.175	-17.838	104.266	1.00	35.61
1326	CA	ILE	A	168	-68.563	-18.251	104.349	1.00	34.54
1327	CB	ILE	A	168	-68.861	-19.320	105.445	1.00	34.98
1328	CG1	ILE	A	168	-69.842	-18.813	106.473	1.00	35.52
1329	CD1	ILE	A	168	-70.844	-19.872	106.786	1.00	38.17
1330	CG2	ILE	A	168	-67.613	-20.007	106.017	1.00	34.24
1331	C	ILE	A	168	-69.510	-17.076	104.402	1.00	33.59
1332	O	ILE	A	168	-69.306	-16.113	105.148	1.00	33.42
1333	N	TYR	A	169	-70.536	-17.145	103.566	1.00	32.42
1334	CA	TYR	A	169	-71.483	-16.057	103.451	1.00	31.27
1335	CB	TYR	A	169	-71.541	-15.535	102.006	1.00	31.08
1336	CG	TYR	A	169	-70.223	-15.218	101.327	1.00	29.82
1337	CD1	TYR	A	169	-69.321	-16.224	100.988	1.00	29.95
1338	CE1	TYR	A	169	-68.132	-15.930	100.344	1.00	26.98
1339	CZ	TYR	A	169	-67.838	-14.623	100.024	1.00	26.49
1340	OH	TYR	A	169	-66.654	-14.309	99.401	1.00	26.74
1341	CE2	TYR	A	169	-68.709	-13.619	100.329	1.00	26.91
1342	CD2	TYR	A	169	-69.901	-13.915	100.976	1.00	28.85
1343	C	TYR	A	169	-72.867	-16.542	103.833	1.00	31.21
1344	O	TYR	A	169	-73.436	-17.402	103.150	1.00	31.35
1345	N	ASN	A	170	-73.425	-15.995	104.910	1.00	30.37
1346	CA	ASN	A	170	-74.810	-16.300	105.252	1.00	29.55
1347	CB	ASN	A	170	-74.973	-16.591	106.741	1.00	29.56
1348	CG	ASN	A	170	-74.100	-17.721	107.210	1.00	30.27
1349	OD1	ASN	A	170	-74.377	-18.895	106.942	1.00	33.44
1350	ND2	ASN	A	170	-73.017	-17.382	107.883	1.00	27.98
1351	C	ASN	A	170	-75.643	-15.088	104.871	1.00	29.05
1352	O	ASN	A	170	-75.271	-13.982	105.169	1.00	28.88
1353	N	GLY	A	171	-76.755	-15.294	104.178	1.00	28.81
1354	CA	GLY	A	171	-77.619	-14.191	103.819	1.00	27.99
1355	C	GLY	A	171	-77.125	-13.255	102.730	1.00	27.59
1356	O	GLY	A	171	-77.851	-12.359	102.329	1.00	27.39
1357	N	ILE	A	172	-75.892	-13.443	102.270	1.00	27.17
1358	CA	ILE	A	172	-75.353	-12.650	101.167	1.00	26.43
1359	CB	ILE	A	172	-74.426	-11.503	101.670	1.00	26.40
1360	CG1	ILE	A	172	-73.386	-12.055	102.647	1.00	25.64
1361	CD1	ILE	A	172	-72.402	-11.015	103.223	1.00	26.18
1362	CG2	ILE	A	172	-75.255	-10.351	102.259	1.00	24.00
1363	C	ILE	A	172	-74.591	-13.559	100.199	1.00	26.31
1364	O	ILE	A	172	-74.102	-14.608	100.599	1.00	26.82
1365	N	THR	A	173	-74.482	-13.137	98.946	1.00	25.63
1366	CA	THR	A	173	-73.808	-13.911	97.909	1.00	25.74
1367	CB	THR	A	173	-74.403	-13.579	96.500	1.00	25.82

FIGURE 3 AA

A	B	C	D	E	F	G	H	I	J
1368	OG1	THR	A	173	-74.590	-12.161	96.348	1.00	25.46
1369	CG2	THR	A	173	-75.815	-14.126	96.355	1.00	26.31
1370	C	THR	A	173	-72.316	-13.633	97.848	1.00	25.51
1371	O	THR	A	173	-71.849	-12.581	98.293	1.00	25.26
1372	N	ASP	A	174	-71.564	-14.579	97.286	1.00	24.69
1373	CA	ASP	A	174	-70.169	-14.323	96.987	1.00	23.44
1374	CB	ASP	A	174	-69.342	-15.601	97.037	1.00	23.91
1375	CG	ASP	A	174	-69.644	-16.559	95.889	1.00	23.96
1376	OD1	ASP	A	174	-68.810	-17.441	95.624	1.00	24.39
1377	OD2	ASP	A	174	-70.665	-16.512	95.188	1.00	24.49
1378	C	ASP	A	174	-70.157	-13.671	95.586	1.00	23.53
1379	O	ASP	A	174	-71.220	-13.371	95.010	1.00	22.50
1380	N	TRP	A	175	-68.971	-13.451	95.044	1.00	22.89
1381	CA	TRP	A	175	-68.836	-12.761	93.777	1.00	23.07
1382	CB	TRP	A	175	-67.351	-12.556	93.392	1.00	22.86
1383	CG	TRP	A	175	-67.240	-11.574	92.296	1.00	22.35
1384	CD1	TRP	A	175	-66.973	-10.237	92.411	1.00	21.88
1385	NE1	TRP	A	175	-66.983	-9.645	91.174	1.00	19.08
1386	CE2	TRP	A	175	-67.287	-10.589	90.234	1.00	20.41
1387	CD2	TRP	A	175	-67.452	-11.819	90.909	1.00	20.68
1388	CE3	TRP	A	175	-67.762	-12.958	90.158	1.00	19.38
1389	CZ3	TRP	A	175	-67.904	-12.840	88.789	1.00	18.17
1390	CH2	TRP	A	175	-67.739	-11.602	88.152	1.00	18.32
1391	CZ2	TRP	A	175	-67.442	-10.465	88.860	1.00	19.82
1392	C	TRP	A	175	-69.674	-13.335	92.629	1.00	23.58
1393	O	TRP	A	175	-70.501	-12.615	92.045	1.00	23.56
1394	N	VAL	A	176	-69.508	-14.620	92.305	1.00	24.17
1395	CA	VAL	A	176	-70.285	-15.171	91.183	1.00	24.60
1396	CB	VAL	A	176	-69.889	-16.608	90.758	1.00	24.92
1397	CG1	VAL	A	176	-69.363	-17.391	91.915	1.00	24.13
1398	CG2	VAL	A	176	-68.944	-16.592	89.570	1.00	26.39
1399	C	VAL	A	176	-71.778	-15.246	91.421	1.00	24.61
1400	O	VAL	A	176	-72.561	-15.120	90.497	1.00	24.85
1401	N	TYR	A	177	-72.192	-15.527	92.636	1.00	24.68
1402	CA	TYR	A	177	-73.620	-15.614	92.844	1.00	24.97
1403	CB	TYR	A	177	-73.935	-16.238	94.186	1.00	24.65
1404	CG	TYR	A	177	-74.217	-17.728	94.115	1.00	25.96
1405	CD1	TYR	A	177	-73.194	-18.654	94.217	1.00	23.76
1406	CE1	TYR	A	177	-73.452	-19.996	94.189	1.00	24.52
1407	CZ	TYR	A	177	-74.742	-20.445	94.054	1.00	25.24
1408	OH	TYR	A	177	-74.997	-21.797	94.034	1.00	25.72
1409	CE2	TYR	A	177	-75.781	-19.557	93.946	1.00	25.19
1410	CD2	TYR	A	177	-75.517	-18.201	93.976	1.00	25.89
1411	C	TYR	A	177	-74.233	-14.242	92.703	1.00	25.10
1412	O	TYR	A	177	-75.323	-14.097	92.154	1.00	25.83
1413	N	GLU	A	178	-73.519	-13.224	93.173	1.00	25.59
1414	CA	GLU	A	178	-73.982	-11.850	93.002	1.00	25.82
1415	CB	GLU	A	178	-73.100	-10.862	93.757	1.00	25.04
1416	CG	GLU	A	178	-73.480	-9.422	93.474	1.00	24.82
1417	CD	GLU	A	178	-72.587	-8.419	94.194	1.00	25.14
1418	OE1	GLU	A	178	-72.633	-7.241	93.826	1.00	24.27



FIGURE 3 AB

A	B	C	D	E	F	G	H	I	J
1419	OE2	GLU	A	178	-71.830	-8.803	95.113	1.00	24.44
1420	C	GLU	A	178	-74.012	-11.430	91.538	1.00	25.79
1421	O	GLU	A	178	-74.999	-10.894	91.055	1.00	26.81
1422	N	GLU	A	179	-72.929	-11.647	90.821	1.00	25.86
1423	CA	GLU	A	179	-72.913	-11.152	89.459	1.00	26.21
1424	CB	GLU	A	179	-71.483	-10.862	88.991	1.00	26.17
1425	CG	GLU	A	179	-71.346	-10.505	87.515	1.00	27.12
1426	CD	GLU	A	179	-71.966	-9.156	87.159	1.00	27.41
1427	OE1	GLU	A	179	-72.110	-8.862	85.957	1.00	29.41
1428	OE2	GLU	A	179	-72.289	-8.374	88.072	1.00	26.56
1429	C	GLU	A	179	-73.640	-12.048	88.466	1.00	26.94
1430	O	GLU	A	179	-74.304	-11.546	87.578	1.00	26.77
1431	N	GLU	A	180	-73.576	-13.363	88.651	1.00	27.47
1432	CA	GLU	A	180	-74.085	-14.253	87.624	1.00	29.07
1433	CB	GLU	A	180	-72.977	-15.211	87.157	1.00	28.09
1434	CG	GLU	A	180	-71.662	-14.511	86.822	1.00	27.82
1435	CD	GLU	A	180	-71.669	-13.738	85.506	1.00	26.85
1436	OE1	GLU	A	180	-72.753	-13.533	84.925	1.00	24.69
1437	OE2	GLU	A	180	-70.562	-13.360	85.039	1.00	27.42
1438	C	GLU	A	180	-75.377	-15.015	87.888	1.00	30.75
1439	O	GLU	A	180	-76.032	-15.435	86.936	1.00	30.84
1440	N	VAL	A	181	-75.753	-15.198	89.151	1.00	32.95
1441	CA	VAL	A	181	-76.956	-15.972	89.473	1.00	34.49
1442	CB	VAL	A	181	-76.643	-17.107	90.469	1.00	34.94
1443	CG1	VAL	A	181	-77.863	-17.989	90.671	1.00	33.86
1444	CG2	VAL	A	181	-75.417	-17.922	90.015	1.00	33.28
1445	C	VAL	A	181	-78.122	-15.150	90.030	1.00	36.05
1446	O	VAL	A	181	-79.203	-15.131	89.455	1.00	37.26
1447	N	PHE	A	182	-77.931	-14.484	91.158	1.00	37.27
1448	CA	PHE	A	182	-79.033	-13.720	91.749	1.00	37.97
1449	CB	PHE	A	182	-78.914	-13.713	93.277	1.00	38.33
1450	CG	PHE	A	182	-78.971	-15.084	93.908	1.00	39.37
1451	CD1	PHE	A	182	-79.625	-16.123	93.290	1.00	40.82
1452	CE1	PHE	A	182	-79.679	-17.376	93.870	1.00	41.48
1453	CZ	PHE	A	182	-79.078	-17.596	95.069	1.00	42.11
1454	CE2	PHE	A	182	-78.422	-16.561	95.709	1.00	42.27
1455	CD2	PHE	A	182	-78.376	-15.317	95.129	1.00	40.99
1456	C	PHE	A	182	-79.151	-12.266	91.271	1.00	38.47
1457	O	PHE	A	182	-80.187	-11.625	91.506	1.00	38.87
1458	N	SER	A	183	-78.106	-11.743	90.617	1.00	38.34
1459	CA	SER	A	183	-78.064	-10.332	90.246	1.00	37.82
1460	CB	SER	A	183	-78.957	-10.014	89.052	1.00	37.51
1461	OG	SER	A	183	-78.362	-10.464	87.848	1.00	37.83
1462	C	SER	A	183	-78.467	-9.503	91.451	1.00	37.91
1463	O	SER	A	183	-79.187	-8.506	91.341	1.00	38.19
1464	N	ALA	A	184	-77.983	-9.927	92.607	1.00	37.60
1465	CA	ALA	A	184	-78.254	-9.236	93.842	1.00	37.80
1466	CB	ALA	A	184	-79.644	-9.581	94.334	1.00	38.33
1467	C	ALA	A	184	-77.231	-9.657	94.862	1.00	37.85
1468	O	ALA	A	184	-76.565	-10.681	94.708	1.00	38.07
1469	N	TYR	A	185	-77.111	-8.853	95.908	1.00	37.60

FIGURE 3 AC

A	B	C	D	E	F	G	H	I	J
1470	CA	TYR	A	185	-76.203	-9.141	96.993	1.00	37.56
1471	CB	TYR	A	185	-75.737	-7.841	97.642	1.00	37.53
1472	CG	TYR	A	185	-74.558	-7.975	98.566	1.00	37.51
1473	CD1	TYR	A	185	-74.288	-6.999	99.521	1.00	37.76
1474	CE1	TYR	A	185	-73.190	-7.101	100.356	1.00	37.08
1475	CZ	TYR	A	185	-72.363	-8.181	100.256	1.00	37.06
1476	OH	TYR	A	185	-71.271	-8.278	101.094	1.00	38.04
1477	CE2	TYR	A	185	-72.610	-9.166	99.323	1.00	35.91
1478	CD2	TYR	A	185	-73.701	-9.058	98.484	1.00	36.85
1479	C	TYR	A	185	-76.889	-9.999	98.036	1.00	37.49
1480	O	TYR	A	185	-76.252	-10.862	98.651	1.00	37.79
1481	N	SER	A	186	-78.184	-9.776	98.238	1.00	37.29
1482	CA	SER	A	186	-78.888	-10.505	99.290	1.00	37.19
1483	CB	SER	A	186	-80.144	-9.775	99.744	1.00	36.89
1484	OG	SER	A	186	-81.125	-9.876	98.752	1.00	37.73
1485	C	SER	A	186	-79.273	-11.900	98.875	1.00	36.64
1486	O	SER	A	186	-79.663	-12.140	97.747	1.00	37.15
1487	N	ALA	A	187	-79.113	-12.812	99.812	1.00	36.04
1488	CA	ALA	A	187	-79.509	-14.190	99.666	1.00	35.72
1489	CB	ALA	A	187	-78.284	-15.085	99.693	1.00	35.34
1490	C	ALA	A	187	-80.409	-14.423	100.885	1.00	35.43
1491	O	ALA	A	187	-80.196	-15.326	101.690	1.00	34.90
1492	N	LEU	A	188	-81.403	-13.549	101.000	1.00	35.76
1493	CA	LEU	A	188	-82.351	-13.517	102.098	1.00	36.19
1494	CB	LEU	A	188	-82.128	-12.250	102.924	1.00	36.90
1495	CG	LEU	A	188	-81.116	-12.343	104.045	1.00	36.81
1496	CD1	LEU	A	188	-81.376	-11.248	105.051	1.00	38.05
1497	CD2	LEU	A	188	-81.318	-13.695	104.665	1.00	37.67
1498	C	LEU	A	188	-83.752	-13.449	101.555	1.00	36.16
1499	O	LEU	A	188	-84.046	-12.606	100.717	1.00	36.37
1500	N	TRP	A	189	-84.643	-14.288	102.060	1.00	36.46
1501	CA	TRP	A	189	-86.019	-14.279	101.560	1.00	36.62
1502	CB	TRP	A	189	-86.216	-15.367	100.495	1.00	36.23
1503	CG	TRP	A	189	-85.307	-15.185	99.351	1.00	34.41
1504	CD1	TRP	A	189	-85.514	-14.389	98.264	1.00	33.31
1505	NE1	TRP	A	189	-84.434	-14.455	97.419	1.00	35.56
1506	CE2	TRP	A	189	-83.496	-15.297	97.965	1.00	35.21
1507	CD2	TRP	A	189	-84.019	-15.772	99.184	1.00	33.94
1508	CE3	TRP	A	189	-83.247	-16.664	99.939	1.00	35.24
1509	CZ3	TRP	A	189	-82.000	-17.047	99.459	1.00	33.38
1510	CH2	TRP	A	189	-81.515	-16.554	98.245	1.00	33.99
1511	CZ2	TRP	A	189	-82.242	-15.678	97.487	1.00	34.09
1512	C	TRP	A	189	-87.063	-14.431	102.657	1.00	37.21
1513	O	TRP	A	189	-87.299	-15.528	103.147	1.00	37.31
1514	N	TRP	A	190	-87.678	-13.314	103.033	1.00	38.06
1515	CA	TRP	A	190	-88.740	-13.310	104.028	1.00	38.71
1516	CB	TRP	A	190	-89.155	-11.879	104.370	1.00	38.83
1517	CG	TRP	A	190	-88.270	-11.103	105.274	1.00	38.32
1518	CD1	TRP	A	190	-87.389	-10.126	104.918	1.00	38.37
1519	NE1	TRP	A	190	-86.765	-9.618	106.031	1.00	38.44
1520	CE2	TRP	A	190	-87.255	-10.254	107.139	1.00	38.85

FIGURE 3 AD

A	B	C	D	E	F	G	H	I	J
1521	CD2	TRP	A	190	-88.218	-11.188	106.697	1.00	39.00
1522	CE3	TRP	A	190	-88.875	-11.971	107.648	1.00	38.63
1523	CZ3	TRP	A	190	-88.563	-11.800	108.982	1.00	39.07
1524	CH2	TRP	A	190	-87.600	-10.867	109.387	1.00	39.64
1525	CZ2	TRP	A	190	-86.939	-10.084	108.480	1.00	38.67
1526	C	TRP	A	190	-89.962	-13.958	103.403	1.00	39.34
1527	O	TRP	A	190	-90.298	-13.652	102.260	1.00	38.94
1528	N	SER	A	191	-90.640	-14.825	104.148	1.00	40.07
1529	CA	SER	A	191	-91.901	-15.367	103.671	1.00	40.97
1530	CB	SER	A	191	-92.399	-16.496	104.568	1.00	41.50
1531	OG	SER	A	191	-93.155	-15.990	105.647	1.00	41.74
1532	C	SER	A	191	-92.893	-14.206	103.633	1.00	41.49
1533	O	SER	A	191	-92.733	-13.211	104.335	1.00	41.38
1534	N	PRO	A	192	-93.949	-14.364	102.857	1.00	41.99
1535	CA	PRO	A	192	-94.829	-13.253	102.500	1.00	42.66
1536	CB	PRO	A	192	-96.010	-13.954	101.810	1.00	42.51
1537	CG	PRO	A	192	-95.436	-15.217	101.309	1.00	42.06
1538	CD	PRO	A	192	-94.443	-15.649	102.342	1.00	41.94
1539	C	PRO	A	192	-95.339	-12.481	103.679	1.00	43.23
1540	O	PRO	A	192	-95.655	-11.293	103.555	1.00	43.70
1541	N	ASN	A	193	-95.424	-13.149	104.814	1.00	43.81
1542	CA	ASN	A	193	-96.025	-12.535	105.970	1.00	44.56
1543	CB	ASN	A	193	-97.148	-13.426	106.490	1.00	45.57
1544	CG	ASN	A	193	-96.783	-14.162	107.747	1.00	47.13
1545	OD1	ASN	A	193	-95.624	-14.202	108.170	1.00	48.73
1546	ND2	ASN	A	193	-97.787	-14.735	108.371	1.00	51.47
1547	C	ASN	A	193	-95.042	-12.163	107.065	1.00	44.28
1548	O	ASN	A	193	-95.425	-11.547	108.060	1.00	44.80
1549	N	GLY	A	194	-93.779	-12.534	106.885	1.00	43.59
1550	CA	GLY	A	194	-92.746	-12.158	107.832	1.00	42.90
1551	C	GLY	A	194	-92.365	-13.281	108.767	1.00	42.46
1552	O	GLY	A	194	-91.286	-13.275	109.355	1.00	41.89
1553	N	THR	A	195	-93.255	-14.257	108.894	1.00	42.23
1554	CA	THR	A	195	-93.015	-15.377	109.786	1.00	42.35
1555	CB	THR	A	195	-94.105	-16.441	109.621	1.00	42.51
1556	OG1	THR	A	195	-95.318	-15.985	110.224	1.00	43.31
1557	CG2	THR	A	195	-93.759	-17.663	110.444	1.00	42.51
1558	C	THR	A	195	-91.640	-16.016	109.579	1.00	41.99
1559	O	THR	A	195	-90.813	-16.045	110.492	1.00	41.82
1560	N	PHE	A	196	-91.399	-16.531	108.376	1.00	41.36
1561	CA	PHE	A	196	-90.135	-17.208	108.113	1.00	40.45
1562	CB	PHE	A	196	-90.388	-18.463	107.284	1.00	40.63
1563	CG	PHE	A	196	-91.227	-19.485	107.987	1.00	39.35
1564	CD1	PHE	A	196	-90.738	-20.157	109.089	1.00	38.75
1565	CE1	PHE	A	196	-91.513	-21.096	109.743	1.00	38.83
1566	CZ	PHE	A	196	-92.777	-21.373	109.290	1.00	37.56
1567	CE2	PHE	A	196	-93.272	-20.708	108.199	1.00	36.97
1568	CD2	PHE	A	196	-92.503	-19.767	107.554	1.00	37.96
1569	C	PHE	A	196	-89.125	-16.315	107.411	1.00	39.96
1570	O	PHE	A	196	-89.479	-15.356	106.723	1.00	40.12
1571	N	LEU	A	197	-87.855	-16.610	107.624	1.00	39.33

FIGURE 3 AE

A	B	C	D	E	F	G	H	I	J
1572	CA	LEU	A	197	-86.792	-15.921	106.903	1.00	38.31
1573	CB	LEU	A	197	-85.943	-15.070	107.831	1.00	38.53
1574	CG	LEU	A	197	-84.748	-14.388	107.187	1.00	39.02
1575	CD1	LEU	A	197	-84.012	-13.621	108.269	1.00	40.57
1576	CD2	LEU	A	197	-85.194	-13.460	106.068	1.00	39.51
1577	C	LEU	A	197	-85.942	-17.016	106.335	1.00	37.20
1578	O	LEU	A	197	-85.277	-17.719	107.070	1.00	36.63
1579	N	ALA	A	198	-86.012	-17.210	105.029	1.00	36.53
1580	CA	ALA	A	198	-85.174	-18.231	104.416	1.00	35.68
1581	CB	ALA	A	198	-85.896	-18.871	103.250	1.00	35.91
1582	C	ALA	A	198	-83.883	-17.560	103.962	1.00	34.82
1583	O	ALA	A	198	-83.877	-16.369	103.617	1.00	34.28
1584	N	TYR	A	199	-82.780	-18.295	103.991	1.00	33.86
1585	CA	TYR	A	199	-81.533	-17.730	103.485	1.00	33.19
1586	CB	TYR	A	199	-80.798	-16.950	104.571	1.00	32.78
1587	CG	TYR	A	199	-80.354	-17.816	105.727	1.00	33.58
1588	CD1	TYR	A	199	-79.074	-18.358	105.773	1.00	32.56
1589	CE1	TYR	A	199	-78.676	-19.153	106.840	1.00	32.70
1590	CZ	TYR	A	199	-79.566	-19.409	107.867	1.00	32.39
1591	OH	TYR	A	199	-79.204	-20.197	108.935	1.00	33.54
1592	CE2	TYR	A	199	-80.820	-18.882	107.842	1.00	32.58
1593	CD2	TYR	A	199	-81.216	-18.090	106.779	1.00	33.74
1594	C	TYR	A	199	-80.640	-18.805	102.898	1.00	32.53
1595	O	TYR	A	199	-80.836	-19.979	103.157	1.00	32.66
1596	N	ALA	A	200	-79.655	-18.390	102.102	1.00	32.28
1597	CA	ALA	A	200	-78.700	-19.319	101.509	1.00	31.66
1598	CB	ALA	A	200	-78.590	-19.102	99.985	1.00	31.58
1599	C	ALA	A	200	-77.371	-19.096	102.156	1.00	31.10
1600	O	ALA	A	200	-77.051	-17.982	102.512	1.00	31.98
1601	N	GLN	A	201	-76.586	-20.147	102.318	1.00	30.82
1602	CA	GLN	A	201	-75.253	-19.974	102.864	1.00	30.37
1603	CB	GLN	A	201	-75.065	-20.810	104.109	1.00	30.06
1604	CG	GLN	A	201	-73.659	-20.886	104.511	1.00	29.92
1605	CD	GLN	A	201	-73.433	-21.897	105.590	1.00	32.22
1606	OE1	GLN	A	201	-73.089	-23.034	105.299	1.00	32.66
1607	NE2	GLN	A	201	-73.616	-21.487	106.852	1.00	31.05
1608	C	GLN	A	201	-74.232	-20.391	101.826	1.00	30.16
1609	O	GLN	A	201	-74.350	-21.462	101.244	1.00	30.15
1610	N	PHE	A	202	-73.223	-19.555	101.613	1.00	30.02
1611	CA	PHE	A	202	-72.236	-19.831	100.581	1.00	30.30
1612	CB	PHE	A	202	-72.135	-18.655	99.600	1.00	29.91
1613	CG	PHE	A	202	-73.389	-18.412	98.844	1.00	28.40
1614	CD1	PHE	A	202	-73.806	-19.310	97.870	1.00	26.83
1615	CE1	PHE	A	202	-74.966	-19.103	97.177	1.00	25.09
1616	CZ	PHE	A	202	-75.732	-18.000	97.447	1.00	26.35
1617	CE2	PHE	A	202	-75.338	-17.100	98.439	1.00	26.18
1618	CD2	PHE	A	202	-74.175	-17.312	99.124	1.00	27.09
1619	C	PHE	A	202	-70.878	-20.118	101.165	1.00	30.53
1620	O	PHE	A	202	-70.402	-19.384	102.030	1.00	30.67
1621	N	ASN	A	203	-70.247	-21.173	100.656	1.00	30.49
1622	CA	ASN	A	203	-68.937	-21.597	101.129	1.00	30.96

FIGURE 3 AF

A	B	C	D	E	F	G	H	I	J
1623	CB	ASN	A	203	-69.048	-23.008	101.735	1.00	31.11
1624	CG	ASN	A	203	-67.778	-23.455	102.411	1.00	31.34
1625	OD1	ASN	A	203	-66.727	-22.836	102.238	1.00	31.57
1626	ND2	ASN	A	203	-67.860	-24.543	103.180	1.00	34.70
1627	C	ASN	A	203	-67.894	-21.556	100.008	1.00	30.82
1628	O	ASN	A	203	-67.928	-22.369	99.081	1.00	30.86
1629	N	ASP	A	204	-66.972	-20.611	100.102	1.00	30.71
1630	CA	ASP	A	204	-65.942	-20.417	99.088	1.00	31.08
1631	CB	ASP	A	204	-65.862	-18.950	98.716	1.00	31.03
1632	CG	ASP	A	204	-67.066	-18.504	97.961	1.00	31.81
1633	OD1	ASP	A	204	-68.174	-18.922	98.345	1.00	33.00
1634	OD2	ASP	A	204	-67.007	-17.763	96.966	1.00	34.30
1635	C	ASP	A	204	-64.579	-20.874	99.524	1.00	31.17
1636	O	ASP	A	204	-63.573	-20.516	98.927	1.00	31.18
1637	N	THR	A	205	-64.545	-21.682	100.569	1.00	31.79
1638	CA	THR	A	205	-63.289	-22.139	101.113	1.00	31.97
1639	CB	THR	A	205	-63.538	-23.277	102.077	1.00	32.32
1640	OG1	THR	A	205	-64.383	-22.792	103.118	1.00	32.88
1641	CG2	THR	A	205	-62.241	-23.640	102.806	1.00	32.65
1642	C	THR	A	205	-62.236	-22.536	100.084	1.00	31.74
1643	O	THR	A	205	-61.082	-22.117	100.203	1.00	31.95
1644	N	GLU	A	206	-62.602	-23.335	99.088	1.00	31.47
1645	CA	GLU	A	206	-61.583	-23.766	98.125	1.00	31.78
1646	CB	GLU	A	206	-61.602	-25.289	97.923	1.00	32.33
1647	CG	GLU	A	206	-61.422	-26.118	99.188	1.00	35.48
1648	CD	GLU	A	206	-61.709	-27.596	98.948	1.00	41.10
1649	OE1	GLU	A	206	-60.726	-28.382	98.864	1.00	42.82
1650	OE2	GLU	A	206	-62.907	-27.972	98.817	1.00	40.88
1651	C	GLU	A	206	-61.714	-23.058	96.781	1.00	30.95
1652	O	GLU	A	206	-61.169	-23.514	95.774	1.00	30.73
1653	N	VAL	A	207	-62.440	-21.949	96.767	1.00	29.81
1654	CA	VAL	A	207	-62.572	-21.166	95.552	1.00	29.59
1655	CB	VAL	A	207	-63.826	-20.298	95.613	1.00	29.22
1656	CG1	VAL	A	207	-63.909	-19.353	94.413	1.00	28.22
1657	CG2	VAL	A	207	-65.038	-21.200	95.693	1.00	28.87
1658	C	VAL	A	207	-61.314	-20.333	95.427	1.00	29.48
1659	O	VAL	A	207	-60.923	-19.681	96.375	1.00	30.00
1660	N	PRO	A	208	-60.639	-20.406	94.289	1.00	29.75
1661	CA	PRO	A	208	-59.374	-19.669	94.092	1.00	29.54
1662	CB	PRO	A	208	-58.871	-20.156	92.724	1.00	29.39
1663	CG	PRO	A	208	-59.699	-21.403	92.435	1.00	30.24
1664	CD	PRO	A	208	-61.023	-21.200	93.109	1.00	29.62
1665	C	PRO	A	208	-59.593	-18.166	94.066	1.00	29.18
1666	O	PRO	A	208	-60.687	-17.701	93.796	1.00	29.26
1667	N	LEU	A	209	-58.546	-17.398	94.318	1.00	28.89
1668	CA	LEU	A	209	-58.737	-15.970	94.382	1.00	28.41
1669	CB	LEU	A	209	-58.194	-15.416	95.703	1.00	28.78
1670	CG	LEU	A	209	-59.122	-15.831	96.854	1.00	30.32
1671	CD1	LEU	A	209	-59.365	-14.702	97.815	1.00	32.76
1672	CD2	LEU	A	209	-58.574	-17.040	97.566	1.00	31.36
1673	C	LEU	A	209	-58.105	-15.245	93.231	1.00	27.31

FIGURE 3 AG

A	B	C	D	E	F	G	H	I	J
1674	O	LEU	A	209	-56.957	-15.507	92.907	1.00	28.03
1675	N	ILE	A	210	-58.865	-14.362	92.596	1.00	25.30
1676	CA	ILE	A	210	-58.258	-13.466	91.638	1.00	24.34
1677	CB	ILE	A	210	-59.288	-12.856	90.638	1.00	24.07
1678	CG1	ILE	A	210	-58.602	-11.882	89.681	1.00	22.86
1679	CD1	ILE	A	210	-57.653	-12.506	88.749	1.00	17.11
1680	CG2	ILE	A	210	-60.416	-12.105	91.348	1.00	22.07
1681	C	ILE	A	210	-57.611	-12.379	92.484	1.00	24.74
1682	O	ILE	A	210	-58.214	-11.864	93.471	1.00	24.26
1683	N	GLU	A	211	-56.367	-12.071	92.140	1.00	24.06
1684	CA	GLU	A	211	-55.636	-11.012	92.804	1.00	23.86
1685	CB	GLU	A	211	-54.373	-11.555	93.468	1.00	23.56
1686	CG	GLU	A	211	-54.595	-12.856	94.218	1.00	25.96
1687	CD	GLU	A	211	-53.497	-13.180	95.221	1.00	26.55
1688	OE1	GLU	A	211	-53.806	-13.788	96.242	1.00	29.23
1689	OE2	GLU	A	211	-52.328	-12.837	94.997	1.00	29.08
1690	C	GLU	A	211	-55.236	-9.978	91.769	1.00	23.44
1691	O	GLU	A	211	-54.834	-10.328	90.666	1.00	23.22
1692	N	TYR	A	212	-55.348	-8.708	92.138	1.00	23.21
1693	CA	TYR	A	212	-54.923	-7.615	91.294	1.00	23.31
1694	CB	TYR	A	212	-55.985	-7.259	90.234	1.00	22.86
1695	CG	TYR	A	212	-57.348	-6.961	90.774	1.00	22.22
1696	CD1	TYR	A	212	-57.684	-5.679	91.174	1.00	23.19
1697	CE1	TYR	A	212	-58.916	-5.386	91.671	1.00	21.83
1698	CZ	TYR	A	212	-59.858	-6.368	91.791	1.00	22.04
1699	OH	TYR	A	212	-61.092	-6.029	92.302	1.00	22.37
1700	CE2	TYR	A	212	-59.563	-7.660	91.420	1.00	23.02
1701	CD2	TYR	A	212	-58.301	-7.953	90.910	1.00	22.36
1702	C	TYR	A	212	-54.560	-6.437	92.200	1.00	23.96
1703	O	TYR	A	212	-54.968	-6.388	93.355	1.00	24.35
1704	N	SER	A	213	-53.735	-5.531	91.698	1.00	24.43
1705	CA	SER	A	213	-53.308	-4.386	92.472	1.00	24.97
1706	CB	SER	A	213	-52.023	-3.810	91.898	1.00	24.59
1707	OG	SER	A	213	-51.081	-4.834	91.666	1.00	27.00
1708	C	SER	A	213	-54.350	-3.293	92.445	1.00	25.46
1709	O	SER	A	213	-55.017	-3.073	91.417	1.00	25.74
1710	N	PHE	A	214	-54.484	-2.612	93.581	1.00	25.16
1711	CA	PHE	A	214	-55.314	-1.424	93.686	1.00	25.20
1712	CB	PHE	A	214	-56.482	-1.643	94.650	1.00	24.90
1713	CG	PHE	A	214	-57.523	-0.566	94.571	1.00	25.71
1714	CD1	PHE	A	214	-57.441	0.549	95.390	1.00	24.81
1715	CE1	PHE	A	214	-58.361	1.557	95.302	1.00	25.33
1716	CZ	PHE	A	214	-59.400	1.474	94.396	1.00	25.34
1717	CE2	PHE	A	214	-59.500	0.360	93.564	1.00	25.76
1718	CD2	PHE	A	214	-58.552	-0.641	93.647	1.00	25.42
1719	C	PHE	A	214	-54.356	-0.312	94.145	1.00	25.52
1720	O	PHE	A	214	-53.677	-0.437	95.157	1.00	25.22
1721	N	TYR	A	215	-54.261	0.766	93.385	1.00	25.88
1722	CA	TYR	A	215	-53.219	1.734	93.670	1.00	25.86
1723	CB	TYR	A	215	-52.675	2.327	92.367	1.00	25.83
1724	CG	TYR	A	215	-52.158	1.223	91.478	1.00	25.90

FIGURE 3 AH

A	B	C	D	E	F	G	H	I	J
1725	CD1	TYR	A	215	-52.962	0.673	90.474	1.00	24.54
1726	CE1	TYR	A	215	-52.498	-0.363	89.677	1.00	22.91
1727	CZ	TYR	A	215	-51.224	-0.874	89.891	1.00	23.93
1728	OH	TYR	A	215	-50.772	-1.912	89.118	1.00	23.07
1729	CE2	TYR	A	215	-50.412	-0.362	90.891	1.00	22.24
1730	CD2	TYR	A	215	-50.883	0.682	91.676	1.00	23.91
1731	C	TYR	A	215	-53.668	2.785	94.648	1.00	26.58
1732	O	TYR	A	215	-52.848	3.371	95.382	1.00	26.13
1733	N	SER	A	216	-54.975	3.003	94.656	1.00	26.91
1734	CA	SER	A	216	-55.603	3.961	95.541	1.00	28.06
1735	CB	SER	A	216	-55.359	3.596	97.006	1.00	28.14
1736	OG	SER	A	216	-56.333	4.212	97.838	1.00	28.49
1737	C	SER	A	216	-55.136	5.390	95.284	1.00	28.60
1738	O	SER	A	216	-54.522	5.698	94.256	1.00	27.55
1739	N	ASP	A	217	-55.438	6.256	96.245	1.00	29.85
1740	CA	ASP	A	217	-55.048	7.658	96.150	1.00	31.23
1741	CB	ASP	A	217	-55.684	8.468	97.306	1.00	32.03
1742	CG	ASP	A	217	-57.235	8.517	97.212	1.00	36.76
1743	OD1	ASP	A	217	-57.792	8.879	96.126	1.00	37.66
1744	OD2	ASP	A	217	-57.985	8.184	98.171	1.00	41.02
1745	C	ASP	A	217	-53.517	7.768	96.135	1.00	31.09
1746	O	ASP	A	217	-52.792	6.883	96.615	1.00	30.94
1747	N	GLU	A	218	-53.030	8.851	95.564	1.00	31.23
1748	CA	GLU	A	218	-51.600	9.117	95.495	1.00	31.57
1749	CB	GLU	A	218	-51.380	10.515	94.911	1.00	31.79
1750	CG	GLU	A	218	-49.948	10.987	94.981	1.00	34.28
1751	CD	GLU	A	218	-49.771	12.350	94.364	1.00	36.98
1752	OE1	GLU	A	218	-48.607	12.764	94.204	1.00	38.67
1753	OE2	GLU	A	218	-50.792	13.001	94.038	1.00	38.85
1754	C	GLU	A	218	-50.831	8.923	96.823	1.00	31.30
1755	O	GLU	A	218	-49.649	8.593	96.808	1.00	30.88
1756	N	SER	A	219	-51.507	9.105	97.958	1.00	31.27
1757	CA	SER	A	219	-50.917	8.889	99.300	1.00	31.15
1758	CB	SER	A	219	-51.870	9.442	100.363	1.00	31.69
1759	OG	SER	A	219	-52.089	10.817	100.141	1.00	35.63
1760	C	SER	A	219	-50.580	7.447	99.723	1.00	30.25
1761	O	SER	A	219	-49.831	7.254	100.690	1.00	29.72
1762	N	LEU	A	220	-51.176	6.438	99.080	1.00	29.12
1763	CA	LEU	A	220	-50.864	5.051	99.446	1.00	28.25
1764	CB	LEU	A	220	-51.833	4.071	98.791	1.00	27.97
1765	CG	LEU	A	220	-52.445	2.973	99.649	1.00	29.05
1766	CD1	LEU	A	220	-52.744	1.692	98.827	1.00	26.88
1767	CD2	LEU	A	220	-51.643	2.669	100.936	1.00	25.26
1768	C	LEU	A	220	-49.494	4.801	98.856	1.00	27.67
1769	O	LEU	A	220	-49.348	4.774	97.627	1.00	26.93
1770	N	GLN	A	221	-48.487	4.604	99.693	1.00	27.07
1771	CA	GLN	A	221	-47.165	4.439	99.115	1.00	27.05
1772	CB	GLN	A	221	-46.035	4.916	100.051	1.00	26.55
1773	CG	GLN	A	221	-45.174	3.856	100.608	1.00	27.44
1774	CD	GLN	A	221	-44.153	4.353	101.649	1.00	27.15
1775	OE1	GLN	A	221	-44.189	3.907	102.788	1.00	26.51

FIGURE 3 AI

A	B	C	D	E	F	G	H	I	J
1776	NE2	GLN	A	221	-43.241	5.233	101.247	1.00	23.19
1777	C	GLN	A	221	-46.963	3.043	98.505	1.00	26.56
1778	O	GLN	A	221	-46.320	2.927	97.479	1.00	26.46
1779	N	TYR	A	222	-47.558	2.016	99.111	1.00	26.45
1780	CA	TYR	A	222	-47.486	0.640	98.598	1.00	26.17
1781	CB	TYR	A	222	-47.095	-0.367	99.687	1.00	25.55
1782	CG	TYR	A	222	-45.625	-0.320	100.069	1.00	26.44
1783	CD1	TYR	A	222	-44.698	-1.208	99.510	1.00	23.84
1784	CE1	TYR	A	222	-43.347	-1.155	99.870	1.00	25.81
1785	CZ	TYR	A	222	-42.927	-0.211	100.802	1.00	25.57
1786	OH	TYR	A	222	-41.604	-0.109	101.163	1.00	25.00
1787	CE2	TYR	A	222	-43.831	0.679	101.350	1.00	25.91
1788	CD2	TYR	A	222	-45.164	0.620	100.994	1.00	26.23
1789	C	TYR	A	222	-48.854	0.235	98.078	1.00	26.17
1790	O	TYR	A	222	-49.843	0.320	98.802	1.00	26.60
1791	N	PRO	A	223	-48.931	-0.186	96.825	1.00	25.52
1792	CA	PRO	A	223	-50.208	-0.638	96.309	1.00	24.97
1793	CB	PRO	A	223	-49.861	-1.139	94.894	1.00	24.57
1794	CG	PRO	A	223	-48.696	-0.323	94.484	1.00	24.47
1795	CD	PRO	A	223	-47.873	-0.199	95.791	1.00	25.38
1796	C	PRO	A	223	-50.736	-1.752	97.186	1.00	24.85
1797	O	PRO	A	223	-49.977	-2.469	97.821	1.00	23.95
1798	N	LYS	A	224	-52.049	-1.890	97.199	1.00	25.28
1799	CA	LYS	A	224	-52.718	-2.944	97.927	1.00	26.38
1800	CB	LYS	A	224	-54.005	-2.404	98.559	1.00	26.73
1801	CG	LYS	A	224	-54.884	-3.505	99.113	1.00	31.45
1802	CD	LYS	A	224	-56.300	-3.033	99.415	1.00	38.45
1803	CE	LYS	A	224	-57.258	-4.231	99.540	1.00	40.77
1804	NZ	LYS	A	224	-58.666	-3.805	99.861	1.00	43.53
1805	C	LYS	A	224	-53.093	-4.046	96.941	1.00	26.16
1806	O	LYS	A	224	-53.346	-3.787	95.770	1.00	26.68
1807	N	THR	A	225	-53.150	-5.277	97.413	1.00	25.90
1808	CA	THR	A	225	-53.533	-6.366	96.555	1.00	25.55
1809	CB	THR	A	225	-52.553	-7.532	96.751	1.00	25.37
1810	OG1	THR	A	225	-51.293	-7.181	96.178	1.00	25.61
1811	CG2	THR	A	225	-52.972	-8.742	95.937	1.00	25.25
1812	C	THR	A	225	-54.955	-6.775	96.912	1.00	25.60
1813	O	THR	A	225	-55.212	-7.167	98.029	1.00	25.34
1814	N	VAL	A	226	-55.890	-6.654	95.973	1.00	25.53
1815	CA	VAL	A	226	-57.248	-7.081	96.259	1.00	25.10
1816	CB	VAL	A	226	-58.291	-6.298	95.437	1.00	25.59
1817	CG1	VAL	A	226	-59.694	-6.918	95.590	1.00	23.61
1818	CG2	VAL	A	226	-58.308	-4.843	95.852	1.00	23.96
1819	C	VAL	A	226	-57.326	-8.554	95.912	1.00	25.63
1820	O	VAL	A	226	-56.780	-8.984	94.901	1.00	25.43
1821	N	ARG	A	227	-57.982	-9.327	96.766	1.00	26.04
1822	CA	ARG	A	227	-58.085	-10.752	96.574	1.00	26.89
1823	CB	ARG	A	227	-57.274	-11.497	97.636	1.00	27.10
1824	CG	ARG	A	227	-55.813	-11.080	97.664	1.00	29.19
1825	CD	ARG	A	227	-54.920	-11.828	98.648	1.00	31.64
1826	NE	ARG	A	227	-53.504	-11.567	98.358	1.00	35.93



FIGURE 3 AJ

A	B	C	D	E	F	G	H	I	J
1827	CZ	ARG	A	227	-52.752	-10.621	98.943	1.00	36.92
1828	NH1	ARG	A	227	-53.256	-9.829	99.885	1.00	37.20
1829	NH2	ARG	A	227	-51.478	-10.480	98.590	1.00	35.93
1830	C	ARG	A	227	-59.535	-11.122	96.677	1.00	27.13
1831	O	ARG	A	227	-60.190	-10.820	97.672	1.00	27.94
1832	N	VAL	A	228	-60.071	-11.751	95.641	1.00	26.85
1833	CA	VAL	A	228	-61.466	-12.133	95.722	1.00	26.24
1834	CB	VAL	A	228	-62.430	-11.041	95.174	1.00	26.15
1835	CG1	VAL	A	228	-63.649	-11.665	94.551	1.00	26.07
1836	CG2	VAL	A	228	-61.738	-10.114	94.239	1.00	26.89
1837	C	VAL	A	228	-61.755	-13.519	95.195	1.00	25.78
1838	O	VAL	A	228	-61.321	-13.887	94.111	1.00	26.53
1839	N	PRO	A	229	-62.450	-14.301	96.019	1.00	25.21
1840	CA	PRO	A	229	-62.839	-15.669	95.672	1.00	24.52
1841	CB	PRO	A	229	-63.740	-16.071	96.834	1.00	25.29
1842	CG	PRO	A	229	-63.229	-15.220	97.994	1.00	25.36
1843	CD	PRO	A	229	-62.917	-13.898	97.360	1.00	24.47
1844	C	PRO	A	229	-63.612	-15.616	94.375	1.00	24.65
1845	O	PRO	A	229	-64.760	-15.183	94.347	1.00	24.19
1846	N	TYR	A	230	-62.964	-16.027	93.289	1.00	24.36
1847	CA	TYR	A	230	-63.563	-15.911	91.983	1.00	23.77
1848	CB	TYR	A	230	-63.007	-14.676	91.319	1.00	24.05
1849	CG	TYR	A	230	-63.489	-14.382	89.923	1.00	23.33
1850	CD1	TYR	A	230	-64.134	-13.189	89.647	1.00	19.84
1851	CE1	TYR	A	230	-64.565	-12.895	88.384	1.00	19.63
1852	CZ	TYR	A	230	-64.325	-13.783	87.349	1.00	19.88
1853	OH	TYR	A	230	-64.726	-13.443	86.090	1.00	21.53
1854	CE2	TYR	A	230	-63.651	-14.972	87.564	1.00	20.98
1855	CD2	TYR	A	230	-63.228	-15.263	88.859	1.00	24.22
1856	C	TYR	A	230	-63.199	-17.142	91.200	1.00	24.08
1857	O	TYR	A	230	-62.029	-17.390	90.902	1.00	24.05
1858	N	PRO	A	231	-64.222	-17.915	90.868	1.00	23.61
1859	CA	PRO	A	231	-64.049	-19.161	90.144	1.00	23.30
1860	CB	PRO	A	231	-65.316	-19.934	90.491	1.00	23.32
1861	CG	PRO	A	231	-66.190	-18.985	91.237	1.00	24.17
1862	CD	PRO	A	231	-65.630	-17.626	91.155	1.00	23.35
1863	C	PRO	A	231	-64.025	-18.918	88.635	1.00	22.79
1864	O	PRO	A	231	-65.050	-18.539	88.061	1.00	22.19
1865	N	LYS	A	232	-62.872	-19.133	88.017	1.00	22.32
1866	CA	LYS	A	232	-62.752	-19.057	86.570	1.00	22.26
1867	CB	LYS	A	232	-61.307	-18.732	86.160	1.00	22.67
1868	CG	LYS	A	232	-60.827	-17.367	86.648	1.00	21.38
1869	CD	LYS	A	232	-59.439	-17.025	86.162	1.00	20.10
1870	CE	LYS	A	232	-59.004	-15.620	86.638	1.00	18.95
1871	NZ	LYS	A	232	-59.287	-14.578	85.598	1.00	17.84
1872	C	LYS	A	232	-63.252	-20.385	85.954	1.00	22.23
1873	O	LYS	A	232	-63.507	-21.348	86.672	1.00	22.23
1874	N	ALA	A	233	-63.412	-20.420	84.635	1.00	21.66
1875	CA	ALA	A	233	-63.988	-21.579	83.962	1.00	21.92
1876	CB	ALA	A	233	-63.883	-21.419	82.426	1.00	21.89
1877	C	ALA	A	233	-63.335	-22.874	84.428	1.00	21.87

FIGURE 3 AK

A	B	C	D	E	F	G	H	I	J
1878	O	ALA	A	233	-62.128	-22.988	84.387	1.00	21.97
1879	N	GLY	A	234	-64.133	-23.827	84.905	1.00	22.24
1880	CA	GLY	A	234	-63.599	-25.090	85.395	1.00	22.87
1881	C	GLY	A	234	-62.986	-25.160	86.806	1.00	23.76
1882	O	GLY	A	234	-62.630	-26.261	87.277	1.00	23.88
1883	N	ALA	A	235	-62.850	-24.023	87.486	1.00	23.23
1884	CA	ALA	A	235	-62.237	-24.007	88.821	1.00	23.51
1885	CB	ALA	A	235	-61.771	-22.575	89.206	1.00	22.75
1886	C	ALA	A	235	-63.213	-24.538	89.844	1.00	23.19
1887	O	ALA	A	235	-64.340	-24.820	89.510	1.00	23.52
1888	N	VAL	A	236	-62.822	-24.689	91.102	1.00	23.98
1889	CA	VAL	A	236	-63.838	-25.200	92.004	1.00	24.29
1890	CB	VAL	A	236	-63.298	-26.066	93.229	1.00	25.20
1891	CG1	VAL	A	236	-63.504	-25.396	94.602	1.00	24.06
1892	CG2	VAL	A	236	-61.850	-26.641	92.988	1.00	24.27
1893	C	VAL	A	236	-64.771	-24.075	92.379	1.00	24.63
1894	O	VAL	A	236	-64.329	-22.929	92.575	1.00	25.18
1895	N	ASN	A	237	-66.062	-24.394	92.436	1.00	24.56
1896	CA	ASN	A	237	-67.118	-23.434	92.743	1.00	24.60
1897	CB	ASN	A	237	-68.394	-23.824	92.004	1.00	24.56
1898	CG	ASN	A	237	-68.445	-23.246	90.600	1.00	25.34
1899	OD1	ASN	A	237	-67.634	-22.392	90.273	1.00	27.31
1900	ND2	ASN	A	237	-69.406	-23.683	89.782	1.00	23.82
1901	C	ASN	A	237	-67.444	-23.358	94.222	1.00	25.42
1902	O	ASN	A	237	-67.070	-24.222	94.991	1.00	25.69
1903	N	PRO	A	238	-68.090	-22.279	94.632	1.00	25.96
1904	CA	PRO	A	238	-68.683	-22.233	95.958	1.00	26.32
1905	CB	PRO	A	238	-69.400	-20.884	95.952	1.00	26.42
1906	CG	PRO	A	238	-69.528	-20.553	94.442	1.00	25.19
1907	CD	PRO	A	238	-68.230	-20.992	93.915	1.00	25.53
1908	C	PRO	A	238	-69.727	-23.344	96.060	1.00	27.23
1909	O	PRO	A	238	-70.230	-23.827	95.052	1.00	26.67
1910	N	THR	A	239	-70.046	-23.741	97.286	1.00	28.17
1911	CA	THR	A	239	-71.105	-24.692	97.512	1.00	28.46
1912	CB	THR	A	239	-70.609	-25.837	98.405	1.00	29.27
1913	OG1	THR	A	239	-69.917	-25.283	99.532	1.00	29.54
1914	CG2	THR	A	239	-69.513	-26.673	97.681	1.00	25.81
1915	C	THR	A	239	-72.177	-23.878	98.207	1.00	29.49
1916	O	THR	A	239	-71.887	-22.802	98.738	1.00	29.73
1917	N	VAL	A	240	-73.411	-24.373	98.197	1.00	29.98
1918	CA	VAL	A	240	-74.530	-23.672	98.804	1.00	30.90
1919	CB	VAL	A	240	-75.606	-23.309	97.775	1.00	30.78
1920	CG1	VAL	A	240	-75.900	-21.829	97.760	1.00	31.50
1921	CG2	VAL	A	240	-75.293	-23.920	96.427	1.00	30.72
1922	C	VAL	A	240	-75.343	-24.545	99.710	1.00	31.57
1923	O	VAL	A	240	-75.595	-25.727	99.407	1.00	31.33
1924	N	LYS	A	241	-75.836	-23.915	100.768	1.00	32.00
1925	CA	LYS	A	241	-76.736	-24.559	101.698	1.00	32.73
1926	CB	LYS	A	241	-76.042	-24.783	103.038	1.00	33.06
1927	CG	LYS	A	241	-75.128	-26.011	103.106	1.00	33.99
1928	CD	LYS	A	241	-74.480	-26.061	104.485	1.00	37.77

FIGURE 3 AL

A	B	C	D	E	F	G	H	I	J
1929	CE	LYS	A	241	-73.908	-27.425	104.833	1.00	39.21
1930	NZ	LYS	A	241	-72.867	-27.825	103.872	1.00	42.49
1931	C	LYS	A	241	-77.963	-23.675	101.872	1.00	33.02
1932	O	LYS	A	241	-77.878	-22.447	101.862	1.00	32.97
1933	N	PHE	A	242	-79.116	-24.304	101.997	1.00	33.38
1934	CA	PHE	A	242	-80.327	-23.553	102.201	1.00	34.14
1935	CB	PHE	A	242	-81.364	-23.875	101.138	1.00	33.59
1936	CG	PHE	A	242	-82.379	-22.804	100.980	1.00	32.07
1937	CD1	PHE	A	242	-82.064	-21.641	100.303	1.00	30.58
1938	CE1	PHE	A	242	-82.995	-20.652	100.165	1.00	29.57
1939	CZ	PHE	A	242	-84.250	-20.810	100.728	1.00	31.16
1940	CE2	PHE	A	242	-84.561	-21.963	101.422	1.00	29.96
1941	CD2	PHE	A	242	-83.638	-22.939	101.546	1.00	30.79
1942	C	PHE	A	242	-80.901	-23.790	103.595	1.00	35.20
1943	O	PHE	A	242	-80.822	-24.895	104.140	1.00	35.41
1944	N	PHE	A	243	-81.480	-22.742	104.164	1.00	36.01
1945	CA	PHE	A	243	-81.978	-22.807	105.527	1.00	36.78
1946	CB	PHE	A	243	-80.936	-22.289	106.516	1.00	35.91
1947	CG	PHE	A	243	-79.667	-23.077	106.568	1.00	35.81
1948	CD1	PHE	A	243	-78.541	-22.647	105.870	1.00	34.72
1949	CE1	PHE	A	243	-77.356	-23.344	105.936	1.00	33.39
1950	CZ	PHE	A	243	-77.264	-24.486	106.717	1.00	35.51
1951	CE2	PHE	A	243	-78.379	-24.924	107.442	1.00	34.98
1952	CD2	PHE	A	243	-79.568	-24.209	107.368	1.00	35.08
1953	C	PHE	A	243	-83.152	-21.875	105.645	1.00	37.64
1954	O	PHE	A	243	-83.216	-20.862	104.959	1.00	37.68
1955	N	VAL	A	244	-84.086	-22.221	106.516	1.00	38.88
1956	CA	VAL	A	244	-85.180	-21.315	106.819	1.00	39.81
1957	CB	VAL	A	244	-86.448	-21.629	106.011	1.00	39.73
1958	CG1	VAL	A	244	-86.663	-23.099	105.909	1.00	40.45
1959	CG2	VAL	A	244	-87.660	-20.917	106.589	1.00	39.49
1960	C	VAL	A	244	-85.389	-21.278	108.341	1.00	40.81
1961	O	VAL	A	244	-85.360	-22.311	109.025	1.00	40.73
1962	N	VAL	A	245	-85.519	-20.070	108.871	1.00	41.56
1963	CA	VAL	A	245	-85.668	-19.881	110.302	1.00	42.70
1964	CB	VAL	A	245	-84.494	-19.061	110.867	1.00	42.62
1965	CG1	VAL	A	245	-84.602	-17.607	110.441	1.00	41.92
1966	CG2	VAL	A	245	-84.428	-19.175	112.381	1.00	42.55
1967	C	VAL	A	245	-86.982	-19.178	110.619	1.00	43.50
1968	O	VAL	A	245	-87.409	-18.286	109.886	1.00	43.71
1969	N	ASN	A	246	-87.627	-19.607	111.700	1.00	44.67
1970	CA	ASN	A	246	-88.873	-19.005	112.169	1.00	45.89
1971	CB	ASN	A	246	-89.574	-19.983	113.106	1.00	45.69
1972	CG	ASN	A	246	-91.029	-19.629	113.356	1.00	45.83
1973	OD1	ASN	A	246	-91.391	-18.460	113.496	1.00	44.42
1974	ND2	ASN	A	246	-91.873	-20.653	113.433	1.00	45.15
1975	C	ASN	A	246	-88.538	-17.724	112.927	1.00	46.85
1976	O	ASN	A	246	-87.882	-17.765	113.956	1.00	46.79
1977	N	THR	A	247	-88.964	-16.578	112.427	1.00	48.25
1978	CA	THR	A	247	-88.616	-15.343	113.114	1.00	49.89
1979	CB	THR	A	247	-88.520	-14.175	112.123	1.00	49.75

FIGURE 3 AM

A	B	C	D	E	F	G	H	I	J
1980	OG1	THR	A	247	-89.810	-13.910	111.561	1.00	49.26
1981	CG2	THR	A	247	-87.663	-14.574	110.924	1.00	50.06
1982	C	THR	A	247	-89.584	-15.006	114.247	1.00	51.26
1983	O	THR	A	247	-89.356	-14.074	115.010	1.00	51.43
1984	N	ASP	A	248	-90.668	-15.765	114.349	1.00	52.69
1985	CA	ASP	A	248	-91.657	-15.527	115.382	1.00	54.07
1986	CB	ASP	A	248	-93.049	-15.935	114.897	1.00	54.08
1987	CG	ASP	A	248	-93.630	-14.952	113.906	1.00	54.15
1988	OD1	ASP	A	248	-93.169	-13.792	113.876	1.00	54.84
1989	OD2	ASP	A	248	-94.558	-15.245	113.123	1.00	55.03
1990	C	ASP	A	248	-91.300	-16.282	116.654	1.00	55.20
1991	O	ASP	A	248	-91.787	-15.952	117.740	1.00	55.47
1992	N	SER	A	249	-90.448	-17.293	116.520	1.00	56.35
1993	CA	SER	A	249	-90.017	-18.068	117.672	1.00	57.70
1994	CB	SER	A	249	-90.022	-19.562	117.349	1.00	57.84
1995	OG	SER	A	249	-89.235	-19.840	116.200	1.00	59.31
1996	C	SER	A	249	-88.629	-17.632	118.144	1.00	58.50
1997	O	SER	A	249	-87.880	-18.424	118.719	1.00	58.56
1998	N	LEU	A	250	-88.283	-16.370	117.907	1.00	59.41
1999	CA	LEU	A	250	-86.969	-15.897	118.321	1.00	60.16
2000	CB	LEU	A	250	-86.665	-14.493	117.798	1.00	60.09
2001	CG	LEU	A	250	-85.728	-14.558	116.581	1.00	59.67
2002	CD1	LEU	A	250	-86.148	-13.589	115.488	1.00	59.18
2003	CD2	LEU	A	250	-85.660	-15.967	116.025	1.00	59.15
2004	C	LEU	A	250	-86.765	-16.062	119.827	1.00	60.99
2005	O	LEU	A	250	-87.638	-15.750	120.644	1.00	60.90
2006	N	SER	A	251	-85.573	-16.550	120.150	1.00	61.75
2007	CA	SER	A	251	-85.219	-17.082	121.457	1.00	62.33
2008	CB	SER	A	251	-84.058	-18.045	121.231	1.00	62.77
2009	OG	SER	A	251	-83.915	-18.320	119.837	1.00	63.26
2010	C	SER	A	251	-84.867	-16.149	122.614	1.00	62.50
2011	O	SER	A	251	-85.283	-16.393	123.752	1.00	62.69
2012	N	SER	A	252	-84.065	-15.121	122.340	1.00	62.50
2013	CA	SER	A	252	-83.643	-14.154	123.364	1.00	62.28
2014	CB	SER	A	252	-84.851	-13.472	124.017	1.00	62.54
2015	OG	SER	A	252	-85.366	-12.425	123.206	1.00	62.89
2016	C	SER	A	252	-82.742	-14.754	124.439	1.00	62.02
2017	O	SER	A	252	-82.110	-14.029	125.199	1.00	62.19
2018	N	VAL	A	253	-82.694	-16.081	124.499	1.00	61.65
2019	CA	VAL	A	253	-81.866	-16.791	125.468	1.00	61.16
2020	CB	VAL	A	253	-82.699	-17.302	126.672	1.00	61.48
2021	CG1	VAL	A	253	-82.228	-18.683	127.124	1.00	61.20
2022	CG2	VAL	A	253	-82.643	-16.297	127.822	1.00	61.38
2023	C	VAL	A	253	-81.155	-17.955	124.795	1.00	60.70
2024	O	VAL	A	253	-79.951	-18.148	124.977	1.00	60.91
2025	N	THR	A	254	-81.902	-18.732	124.017	1.00	59.69
2026	CA	THR	A	254	-81.305	-19.823	123.259	1.00	58.90
2027	CB	THR	A	254	-82.134	-21.120	123.387	1.00	58.99
2028	OG1	THR	A	254	-82.206	-21.764	122.111	1.00	59.03
2029	CG2	THR	A	254	-83.583	-20.812	123.711	1.00	59.10
2030	C	THR	A	254	-81.107	-19.413	121.792	1.00	57.99

FIGURE 3 AN

A	B	C	D	E	F	G	H	I	J
2031	O	THR	A	254	-81.825	-18.557	121.284	1.00	57.99
2032	N	ASN	A	255	-80.117	-20.010	121.130	1.00	56.82
2033	CA	ASN	A	255	-79.790	-19.678	119.739	1.00	55.54
2034	CB	ASN	A	255	-78.423	-20.268	119.347	1.00	55.63
2035	CG	ASN	A	255	-77.256	-19.398	119.782	1.00	54.94
2036	OD1	ASN	A	255	-77.421	-18.200	120.007	1.00	54.46
2037	ND2	ASN	A	255	-76.063	-19.996	119.890	1.00	56.20
2038	C	ASN	A	255	-80.848	-20.155	118.753	1.00	54.80
2039	O	ASN	A	255	-81.358	-21.269	118.873	1.00	54.78
2040	N	ALA	A	256	-81.173	-19.304	117.783	1.00	53.80
2041	CA	ALA	A	256	-82.132	-19.648	116.727	1.00	52.60
2042	CB	ALA	A	256	-82.250	-18.515	115.745	1.00	52.50
2043	C	ALA	A	256	-81.729	-20.918	115.990	1.00	51.62
2044	O	ALA	A	256	-80.553	-21.133	115.702	1.00	51.68
2045	N	THR	A	257	-82.706	-21.760	115.682	1.00	50.47
2046	CA	THR	A	257	-82.426	-22.986	114.948	1.00	49.46
2047	CB	THR	A	257	-83.070	-24.201	115.644	1.00	49.75
2048	OG1	THR	A	257	-83.674	-25.066	114.666	1.00	50.68
2049	CG2	THR	A	257	-84.245	-23.764	116.501	1.00	50.21
2050	C	THR	A	257	-82.874	-22.858	113.489	1.00	48.15
2051	O	THR	A	257	-84.012	-22.517	113.205	1.00	48.05
2052	N	SER	A	258	-81.958	-23.115	112.568	1.00	46.76
2053	CA	SER	A	258	-82.271	-23.006	111.153	1.00	45.31
2054	CB	SER	A	258	-81.125	-22.358	110.393	1.00	45.03
2055	OG	SER	A	258	-80.925	-21.040	110.852	1.00	45.08
2056	C	SER	A	258	-82.546	-24.369	110.583	1.00	44.36
2057	O	SER	A	258	-81.779	-25.314	110.797	1.00	44.05
2058	N	ILE	A	259	-83.659	-24.475	109.877	1.00	43.32
2059	CA	ILE	A	259	-83.992	-25.729	109.256	1.00	42.61
2060	CB	ILE	A	259	-85.500	-25.945	109.171	1.00	42.56
2061	CG1	ILE	A	259	-86.160	-25.643	110.516	1.00	42.51
2062	CD1	ILE	A	259	-85.716	-26.579	111.630	1.00	42.12
2063	CG2	ILE	A	259	-85.770	-27.386	108.768	1.00	41.83
2064	C	ILE	A	259	-83.388	-25.743	107.871	1.00	42.36
2065	O	ILE	A	259	-83.662	-24.861	107.039	1.00	42.04
2066	N	GLN	A	260	-82.537	-26.731	107.647	1.00	41.69
2067	CA	GLN	A	260	-81.911	-26.883	106.357	1.00	41.23
2068	CB	GLN	A	260	-80.565	-27.615	106.477	1.00	41.39
2069	CG	GLN	A	260	-79.904	-27.935	105.138	1.00	41.31
2070	CD	GLN	A	260	-78.462	-28.393	105.287	1.00	41.98
2071	OE1	GLN	A	260	-78.074	-28.899	106.343	1.00	43.78
2072	NE2	GLN	A	260	-77.663	-28.214	104.235	1.00	40.57
2073	C	GLN	A	260	-82.833	-27.666	105.454	1.00	40.52
2074	O	GLN	A	260	-83.422	-28.673	105.869	1.00	40.70
2075	N	ILE	A	261	-82.973	-27.160	104.234	1.00	39.49
2076	CA	ILE	A	261	-83.652	-27.838	103.147	1.00	38.43
2077	CB	ILE	A	261	-84.569	-26.861	102.417	1.00	38.11
2078	CG1	ILE	A	261	-85.706	-26.408	103.340	1.00	37.92
2079	CD1	ILE	A	261	-86.700	-25.455	102.677	1.00	35.89
2080	CG2	ILE	A	261	-85.151	-27.501	101.180	1.00	37.85
2081	C	ILE	A	261	-82.516	-28.251	102.230	1.00	38.16

FIGURE 3 AO

A	B	C	D	E	F	G	H	I	J
2082	O	ILE	A	261	-81.745	-27.406	101.773	1.00	38.33
2083	N	THR	A	262	-82.372	-29.545	101.982	1.00	37.42
2084	CA	THR	A	262	-81.274	-30.000	101.141	1.00	37.01
2085	CB	THR	A	262	-80.823	-31.395	101.544	1.00	36.89
2086	OG1	THR	A	262	-81.978	-32.203	101.791	1.00	38.71
2087	CG2	THR	A	262	-80.139	-31.356	102.896	1.00	37.90
2088	C	THR	A	262	-81.649	-29.981	99.669	1.00	36.23
2089	O	THR	A	262	-82.820	-30.100	99.312	1.00	36.03
2090	N	ALA	A	263	-80.649	-29.809	98.815	1.00	35.27
2091	CA	ALA	A	263	-80.904	-29.827	97.379	1.00	34.96
2092	CB	ALA	A	263	-79.639	-29.484	96.600	1.00	34.39
2093	C	ALA	A	263	-81.409	-31.215	97.002	1.00	34.41
2094	O	ALA	A	263	-81.124	-32.193	97.687	1.00	34.45
2095	N	PRO	A	264	-82.155	-31.300	95.911	1.00	34.07
2096	CA	PRO	A	264	-82.692	-32.583	95.447	1.00	33.39
2097	CB	PRO	A	264	-83.407	-32.215	94.142	1.00	33.13
2098	CG	PRO	A	264	-83.639	-30.758	94.217	1.00	33.45
2099	CD	PRO	A	264	-82.520	-30.179	95.024	1.00	33.77
2100	C	PRO	A	264	-81.561	-33.552	95.146	1.00	32.55
2101	O	PRO	A	264	-80.461	-33.137	94.789	1.00	32.12
2102	N	ALA	A	265	-81.832	-34.838	95.306	1.00	32.44
2103	CA	ALA	A	265	-80.849	-35.882	95.013	1.00	31.81
2104	CB	ALA	A	265	-81.474	-37.267	95.230	1.00	31.65
2105	C	ALA	A	265	-80.272	-35.757	93.586	1.00	31.53
2106	O	ALA	A	265	-79.090	-35.999	93.363	1.00	31.62
2107	N	SER	A	266	-81.108	-35.379	92.629	1.00	31.21
2108	CA	SER	A	266	-80.656	-35.159	91.260	1.00	31.53
2109	CB	SER	A	266	-81.848	-34.821	90.386	1.00	31.72
2110	OG	SER	A	266	-82.497	-33.672	90.904	1.00	33.45
2111	C	SER	A	266	-79.626	-34.021	91.154	1.00	31.35
2112	O	SER	A	266	-78.956	-33.877	90.136	1.00	30.85
2113	N	MET	A	267	-79.496	-33.216	92.202	1.00	30.95
2114	CA	MET	A	267	-78.508	-32.155	92.178	1.00	31.20
2115	CB	MET	A	267	-79.091	-30.854	92.728	1.00	31.15
2116	CG	MET	A	267	-80.123	-30.228	91.823	1.00	31.38
2117	SD	MET	A	267	-79.395	-29.441	90.337	1.00	30.99
2118	CE	MET	A	267	-80.646	-29.917	89.134	1.00	26.89
2119	C	MET	A	267	-77.279	-32.519	92.970	1.00	31.38
2120	O	MET	A	267	-76.169	-32.137	92.603	1.00	31.24
2121	N	LEU	A	268	-77.487	-33.270	94.052	1.00	32.50
2122	CA	LEU	A	268	-76.427	-33.627	95.001	1.00	32.73
2123	CB	LEU	A	268	-77.044	-34.249	96.264	1.00	32.88
2124	CG	LEU	A	268	-77.862	-33.305	97.169	1.00	33.83
2125	CD1	LEU	A	268	-78.619	-34.089	98.234	1.00	33.53
2126	CD2	LEU	A	268	-76.985	-32.236	97.830	1.00	30.90
2127	C	LEU	A	268	-75.375	-34.554	94.409	1.00	32.58
2128	O	LEU	A	268	-74.322	-34.793	95.001	1.00	32.76
2129	N	ILE	A	269	-75.662	-35.073	93.232	1.00	32.48
2130	CA	ILE	A	269	-74.761	-36.006	92.566	1.00	32.76
2131	CB	ILE	A	269	-75.552	-36.774	91.474	1.00	32.89
2132	CG1	ILE	A	269	-74.923	-38.139	91.213	1.00	35.72

FIGURE 3 AP

A	B	C	D	E	F	G	H	I	J
2133	CD1	ILE	A	269	-75.364	-39.221	92.239	1.00	38.91
2134	CG2	ILE	A	269	-75.752	-35.942	90.196	1.00	33.92
2135	C	ILE	A	269	-73.495	-35.326	92.017	1.00	32.19
2136	O	ILE	A	269	-72.519	-35.992	91.644	1.00	32.60
2137	N	GLY	A	270	-73.501	-33.996	91.994	1.00	31.07
2138	CA	GLY	A	270	-72.343	-33.237	91.559	1.00	29.95
2139	C	GLY	A	270	-72.464	-31.754	91.870	1.00	29.19
2140	O	GLY	A	270	-73.311	-31.339	92.661	1.00	28.83
2141	N	ASP	A	271	-71.598	-30.950	91.260	1.00	28.45
2142	CA	ASP	A	271	-71.654	-29.507	91.448	1.00	27.59
2143	CB	ASP	A	271	-70.558	-28.810	90.654	1.00	27.94
2144	CG	ASP	A	271	-69.197	-29.002	91.243	1.00	28.64
2145	OD1	ASP	A	271	-69.062	-29.687	92.277	1.00	32.28
2146	OD2	ASP	A	271	-68.183	-28.512	90.727	1.00	31.33
2147	C	ASP	A	271	-73.009	-29.009	90.969	1.00	26.80
2148	O	ASP	A	271	-73.530	-29.442	89.930	1.00	26.17
2149	N	HIS	A	272	-73.579	-28.099	91.734	1.00	25.81
2150	CA	HIS	A	272	-74.869	-27.549	91.397	1.00	26.04
2151	CB	HIS	A	272	-75.983	-28.440	91.976	1.00	26.06
2152	CG	HIS	A	272	-75.857	-28.670	93.449	1.00	26.86
2153	ND1	HIS	A	272	-75.037	-29.641	93.982	1.00	28.32
2154	CE1	HIS	A	272	-75.114	-29.605	95.303	1.00	28.38
2155	NE2	HIS	A	272	-75.948	-28.641	95.646	1.00	27.58
2156	CD2	HIS	A	272	-76.429	-28.040	94.504	1.00	26.93
2157	C	HIS	A	272	-74.982	-26.116	91.924	1.00	25.63
2158	O	HIS	A	272	-74.096	-25.620	92.622	1.00	25.67
2159	N	TYR	A	273	-76.077	-25.455	91.589	1.00	25.18
2160	CA	TYR	A	273	-76.310	-24.097	92.044	1.00	25.33
2161	CB	TYR	A	273	-76.217	-23.105	90.898	1.00	24.59
2162	CG	TYR	A	273	-74.954	-23.119	90.098	1.00	24.95
2163	CD1	TYR	A	273	-73.790	-22.620	90.624	1.00	24.16
2164	CE1	TYR	A	273	-72.643	-22.605	89.888	1.00	25.98
2165	CZ	TYR	A	273	-72.636	-23.089	88.598	1.00	25.36
2166	OH	TYR	A	273	-71.449	-23.042	87.899	1.00	26.59
2167	CE2	TYR	A	273	-73.788	-23.593	88.028	1.00	23.35
2168	CD2	TYR	A	273	-74.939	-23.605	88.774	1.00	25.51
2169	C	TYR	A	273	-77.721	-23.960	92.564	1.00	26.02
2170	O	TYR	A	273	-78.628	-24.701	92.175	1.00	26.79
2171	N	LEU	A	274	-77.915	-22.999	93.453	1.00	25.96
2172	CA	LEU	A	274	-79.254	-22.659	93.846	1.00	25.26
2173	CB	LEU	A	274	-79.278	-22.203	95.295	1.00	24.56
2174	CG	LEU	A	274	-80.563	-21.506	95.733	1.00	23.32
2175	CD1	LEU	A	274	-81.768	-22.461	95.653	1.00	21.24
2176	CD2	LEU	A	274	-80.383	-20.940	97.129	1.00	21.74
2177	C	LEU	A	274	-79.496	-21.499	92.902	1.00	25.98
2178	O	LEU	A	274	-78.695	-20.583	92.866	1.00	25.32
2179	N	CYS	A	275	-80.567	-21.523	92.114	1.00	27.06
2180	CA	CYS	A	275	-80.734	-20.447	91.155	1.00	28.60
2181	CB	CYS	A	275	-80.616	-20.952	89.714	1.00	28.81
2182	SG	CYS	A	275	-81.862	-22.181	89.283	1.00	32.54
2183	C	CYS	A	275	-81.998	-19.653	91.328	1.00	29.06

FIGURE 3 AQ

A	B	C	D	E	F	G	H	I	J
2184	O	CYS	A	313	-82.135	-18.580	90.750	1.00	29.63
2185	N	ASP	A	314	-82.936	-20.175	92.101	1.00	29.85
2186	CA	ASP	A	314	-84.158	-19.420	92.354	1.00	30.43
2187	CB	ASP	A	314	-85.174	-19.643	91.234	1.00	30.40
2188	CG	ASP	A	314	-86.338	-18.669	91.301	1.00	31.12
2189	OD1	ASP	A	314	-87.323	-18.939	92.029	1.00	30.91
2190	OD2	ASP	A	314	-86.357	-17.607	90.649	1.00	31.73
2191	C	ASP	A	314	-84.799	-19.731	93.711	1.00	30.92
2192	O	ASP	A	314	-84.871	-20.881	94.152	1.00	30.46
2193	N	VAL	A	315	-85.280	-18.682	94.358	1.00	31.55
2194	CA	VAL	A	315	-85.982	-18.824	95.607	1.00	32.23
2195	CB	VAL	A	315	-85.148	-18.298	96.806	1.00	32.71
2196	CG1	VAL	A	315	-85.968	-18.350	98.104	1.00	32.58
2197	CG2	VAL	A	315	-83.877	-19.085	96.965	1.00	30.85
2198	C	VAL	A	315	-87.269	-18.043	95.462	1.00	33.17
2199	O	VAL	A	315	-87.252	-16.844	95.163	1.00	33.74
2200	N	THR	A	316	-88.400	-18.720	95.615	1.00	33.72
2201	CA	THR	A	316	-89.666	-18.016	95.522	1.00	34.38
2202	CB	THR	A	316	-90.194	-18.040	94.077	1.00	34.88
2203	OG1	THR	A	316	-89.323	-17.279	93.225	1.00	35.83
2204	CG2	THR	A	316	-91.545	-17.310	93.983	1.00	33.77
2205	C	THR	A	316	-90.711	-18.599	96.480	1.00	35.24
2206	O	THR	A	316	-91.060	-19.804	96.406	1.00	34.88
2207	N	TRP	A	317	-91.194	-17.748	97.387	1.00	35.53
2208	CA	TRP	A	317	-92.255	-18.136	98.320	1.00	35.87
2209	CB	TRP	A	317	-92.383	-17.138	99.478	1.00	35.63
2210	CG	TRP	A	317	-91.285	-17.289	100.476	1.00	34.42
2211	CD1	TRP	A	317	-90.101	-16.627	100.493	1.00	33.80
2212	NE1	TRP	A	317	-89.332	-17.047	101.552	1.00	33.52
2213	CE2	TRP	A	317	-90.029	-17.995	102.249	1.00	34.52
2214	CD2	TRP	A	317	-91.265	-18.173	101.592	1.00	34.41
2215	CE3	TRP	A	317	-92.172	-19.098	102.117	1.00	35.32
2216	CZ3	TRP	A	317	-91.817	-19.809	103.256	1.00	34.69
2217	CH2	TRP	A	317	-90.585	-19.608	103.878	1.00	34.85
2218	CZ2	TRP	A	317	-89.679	-18.705	103.395	1.00	35.09
2219	C	TRP	A	317	-93.588	-18.263	97.602	1.00	36.53
2220	O	TRP	A	317	-94.003	-17.359	96.870	1.00	36.29
2221	N	ALA	A	318	-94.258	-19.393	97.809	1.00	37.43
2222	CA	ALA	A	318	-95.545	-19.612	97.179	1.00	38.74
2223	CB	ALA	A	318	-95.691	-21.044	96.784	1.00	39.19
2224	C	ALA	A	318	-96.672	-19.199	98.112	1.00	39.57
2225	O	ALA	A	318	-97.656	-18.627	97.667	1.00	39.87
2226	N	THR	A	319	-96.518	-19.506	99.400	1.00	40.41
2227	CA	THR	A	319	-97.498	-19.162	100.425	1.00	41.08
2228	CB	THR	A	319	-98.475	-20.305	100.666	1.00	41.30
2229	OG1	THR	A	319	-97.789	-21.362	101.344	1.00	43.15
2230	CG2	THR	A	319	-98.932	-20.944	99.378	1.00	41.56
2231	C	THR	A	319	-96.742	-18.960	101.730	1.00	41.45
2232	O	THR	A	319	-95.506	-18.961	101.730	1.00	41.57
2233	N	GLN	A	320	-97.484	-18.820	102.835	1.00	41.08
2234	CA	GLN	A	320	-96.893	-18.659	104.168	1.00	40.97



FIGURE 3 AR

A	B	C	D	E	F	G	H	I	J
2235	CB	GLN	A	282	-97.982	-18.477	105.241	1.00	40.89
2236	CG	GLN	A	282	-99.022	-17.407	104.967	1.00	40.19
2237	CD	GLN	A	282	-98.423	-16.039	104.810	1.00	40.46
2238	OE1	GLN	A	282	-97.218	-15.842	105.021	1.00	41.48
2239	NE2	GLN	A	282	-99.250	-15.084	104.438	1.00	40.81
2240	C	GLN	A	282	-96.043	-19.859	104.578	1.00	40.87
2241	O	GLN	A	282	-95.065	-19.712	105.312	1.00	40.98
2242	N	GLU	A	283	-96.424	-21.042	104.115	1.00	40.93
2243	CA	GLU	A	283	-95.738	-22.266	104.501	1.00	41.80
2244	CB	GLU	A	283	-96.670	-23.121	105.333	1.00	42.18
2245	CG	GLU	A	283	-97.060	-22.507	106.663	1.00	44.15
2246	CD	GLU	A	283	-98.172	-23.289	107.336	1.00	46.00
2247	OE1	GLU	A	283	-98.743	-22.768	108.319	1.00	49.38
2248	OE2	GLU	A	283	-98.475	-24.417	106.878	1.00	45.11
2249	C	GLU	A	283	-95.249	-23.103	103.314	1.00	41.89
2250	O	GLU	A	283	-94.935	-24.298	103.474	1.00	41.58
2251	N	ARG	A	284	-95.210	-22.479	102.136	1.00	41.31
2252	CA	ARG	A	284	-94.719	-23.125	100.931	1.00	41.03
2253	CB	ARG	A	284	-95.883	-23.492	100.003	1.00	41.52
2254	CG	ARG	A	284	-95.473	-23.871	98.571	1.00	42.57
2255	CD	ARG	A	284	-96.620	-24.489	97.747	1.00	44.25
2256	NE	ARG	A	284	-97.243	-25.575	98.498	1.00	46.10
2257	CZ	ARG	A	284	-98.524	-25.919	98.424	1.00	46.28
2258	NH1	ARG	A	284	-99.357	-25.284	97.611	1.00	45.98
2259	NH2	ARG	A	284	-98.972	-26.914	99.171	1.00	46.28
2260	C	ARG	A	284	-93.716	-22.245	100.192	1.00	40.44
2261	O	ARG	A	284	-94.009	-21.104	99.808	1.00	40.37
2262	N	ILE	A	285	-92.528	-22.789	99.987	1.00	39.75
2263	CA	ILE	A	285	-91.486	-22.074	99.278	1.00	39.15
2264	CB	ILE	A	285	-90.341	-21.711	100.244	1.00	39.31
2265	CG1	ILE	A	285	-89.264	-20.934	99.496	1.00	38.61
2266	CD1	ILE	A	285	-88.269	-20.302	100.384	1.00	39.48
2267	CG2	ILE	A	285	-89.752	-22.965	100.864	1.00	38.79
2268	C	ILE	A	285	-90.953	-22.923	98.132	1.00	38.33
2269	O	ILE	A	285	-90.785	-24.132	98.280	1.00	38.22
2270	N	SER	A	286	-90.713	-22.297	96.985	1.00	37.40
2271	CA	SER	A	286	-90.157	-23.015	95.837	1.00	36.42
2272	CB	SER	A	286	-90.917	-22.711	94.562	1.00	36.26
2273	OG	SER	A	286	-90.749	-21.348	94.222	1.00	37.97
2274	C	SER	A	286	-88.696	-22.621	95.677	1.00	35.63
2275	O	SER	A	286	-88.326	-21.450	95.827	1.00	35.04
2276	N	LEU	A	287	-87.887	-23.623	95.366	1.00	34.71
2277	CA	LEU	A	287	-86.456	-23.505	95.287	1.00	34.27
2278	CB	LEU	A	287	-85.870	-24.346	96.417	1.00	34.37
2279	CG	LEU	A	287	-84.891	-23.735	97.417	1.00	36.11
2280	CD1	LEU	A	287	-84.773	-24.619	98.643	1.00	34.38
2281	CD2	LEU	A	287	-85.340	-22.317	97.814	1.00	36.34
2282	C	LEU	A	287	-86.070	-24.126	93.955	1.00	33.93
2283	O	LEU	A	287	-86.444	-25.266	93.682	1.00	34.02
2284	N	GLN	A	288	-85.384	-23.386	93.088	1.00	32.93
2285	CA	GLN	A	288	-84.921	-24.012	91.849	1.00	32.27

FIGURE 3 AS

A	B	C	D	E	F	G	H	I	J
2286	CB	GLN	A	288	-85.272	-23.219	90.586	1.00	32.03
2287	CG	GLN	A	288	-86.749	-23.070	90.314	1.00	32.25
2288	CD	GLN	A	288	-87.036	-22.297	89.034	1.00	33.56
2289	OE1	GLN	A	288	-86.678	-22.736	87.928	1.00	32.25
2290	NE2	GLN	A	288	-87.674	-21.140	89.177	1.00	33.25
2291	C	GLN	A	288	-83.422	-24.191	91.956	1.00	31.43
2292	O	GLN	A	288	-82.717	-23.312	92.448	1.00	31.50
2293	N	TRP	A	289	-82.952	-25.345	91.504	1.00	30.05
2294	CA	TRP	A	289	-81.550	-25.663	91.524	1.00	28.99
2295	CB	TRP	A	289	-81.290	-26.892	92.401	1.00	29.63
2296	CG	TRP	A	289	-81.758	-26.801	93.835	1.00	28.11
2297	CD1	TRP	A	289	-82.994	-27.083	94.304	1.00	26.60
2298	NE1	TRP	A	289	-83.037	-26.919	95.664	1.00	25.30
2299	CE2	TRP	A	289	-81.804	-26.530	96.099	1.00	27.52
2300	CD2	TRP	A	289	-80.974	-26.445	94.971	1.00	27.50
2301	CE3	TRP	A	289	-79.646	-26.063	95.152	1.00	28.54
2302	CZ3	TRP	A	289	-79.203	-25.784	96.419	1.00	28.35
2303	CH2	TRP	A	289	-80.060	-25.868	97.518	1.00	29.89
2304	CZ2	TRP	A	289	-81.360	-26.246	97.380	1.00	27.77
2305	C	TRP	A	289	-81.142	-25.973	90.106	1.00	28.22
2306	O	TRP	A	289	-81.958	-26.428	89.315	1.00	27.95
2307	N	LEU	A	290	-79.863	-25.771	89.807	1.00	28.05
2308	CA	LEU	A	290	-79.318	-25.937	88.465	1.00	27.10
2309	CB	LEU	A	290	-78.901	-24.561	87.940	1.00	27.24
2310	CG	LEU	A	290	-79.195	-24.003	86.546	1.00	27.54
2311	CD1	LEU	A	290	-78.330	-22.756	86.272	1.00	22.78
2312	CD2	LEU	A	290	-79.105	-25.028	85.422	1.00	25.82
2313	C	LEU	A	290	-78.049	-26.722	88.605	1.00	26.26
2314	O	LEU	A	290	-77.204	-26.365	89.390	1.00	25.73
2315	N	ARG	A	291	-77.876	-27.779	87.829	1.00	26.62
2316	CA	ARG	A	291	-76.594	-28.498	87.870	1.00	26.34
2317	CB	ARG	A	291	-76.649	-29.767	87.020	1.00	26.04
2318	CG	ARG	A	291	-77.571	-30.860	87.514	1.00	28.20
2319	CD	ARG	A	291	-77.474	-32.145	86.690	1.00	31.04
2320	NE	ARG	A	291	-78.251	-33.212	87.308	1.00	35.84
2321	CZ	ARG	A	291	-78.782	-34.239	86.656	1.00	34.28
2322	NH1	ARG	A	291	-79.480	-35.139	87.329	1.00	31.91
2323	NH2	ARG	A	291	-78.611	-34.364	85.345	1.00	32.21
2324	C	ARG	A	291	-75.511	-27.599	87.280	1.00	25.50
2325	O	ARG	A	291	-75.818	-26.696	86.502	1.00	24.87
2326	N	ARG	A	292	-74.256	-27.872	87.618	1.00	25.10
2327	CA	ARG	A	292	-73.139	-27.141	87.025	1.00	25.84
2328	CB	ARG	A	292	-71.791	-27.564	87.611	1.00	25.46
2329	CG	ARG	A	292	-70.719	-26.515	87.425	1.00	24.84
2330	CD	ARG	A	292	-69.353	-26.903	87.945	1.00	22.79
2331	NE	ARG	A	292	-68.347	-25.941	87.524	1.00	24.65
2332	CZ	ARG	A	292	-67.209	-25.716	88.186	1.00	27.61
2333	NH1	ARG	A	292	-66.354	-24.806	87.735	1.00	23.20
2334	NH2	ARG	A	292	-66.926	-26.406	89.301	1.00	25.07
2335	C	ARG	A	292	-73.135	-27.221	85.484	1.00	26.01
2336	O	ARG	A	292	-72.722	-26.272	84.810	1.00	26.29

FIGURE 3 AT

A	B	C	D	E	F	G	H	I	J
2337	N	ILE	A	293	-73.582	-28.336	84.916	1.00	26.05
2338	CA	ILE	A	293	-73.810	-28.337	83.482	1.00	25.78
2339	CB	ILE	A	293	-73.613	-29.693	82.855	1.00	26.60
2340	CG1	ILE	A	293	-72.135	-30.125	83.029	1.00	27.40
2341	CD1	ILE	A	293	-71.960	-31.641	83.184	1.00	31.38
2342	CG2	ILE	A	293	-73.939	-29.589	81.383	1.00	24.44
2343	C	ILE	A	293	-75.226	-27.827	83.375	1.00	25.88
2344	O	ILE	A	293	-76.195	-28.521	83.690	1.00	25.88
2345	N	GLN	A	294	-75.332	-26.580	82.955	1.00	25.86
2346	CA	GLN	A	294	-76.572	-25.841	83.078	1.00	25.91
2347	CB	GLN	A	294	-76.277	-24.354	83.074	1.00	25.69
2348	CG	GLN	A	294	-75.298	-23.984	84.156	1.00	24.92
2349	CD	GLN	A	294	-75.007	-22.514	84.196	1.00	23.92
2350	OE1	GLN	A	294	-75.912	-21.691	84.092	1.00	24.34
2351	NE2	GLN	A	294	-73.746	-22.177	84.351	1.00	24.37
2352	C	GLN	A	294	-77.679	-26.146	82.115	1.00	26.78
2353	O	GLN	A	294	-78.414	-25.240	81.727	1.00	26.59
2354	N	ASN	A	295	-77.825	-27.414	81.746	1.00	27.52
2355	CA	ASN	A	295	-78.920	-27.774	80.868	1.00	28.56
2356	CB	ASN	A	295	-78.416	-28.489	79.607	1.00	29.50
2357	CG	ASN	A	295	-77.712	-29.809	79.903	1.00	31.49
2358	OD1	ASN	A	295	-77.614	-30.243	81.051	1.00	32.33
2359	ND2	ASN	A	295	-77.212	-30.450	78.849	1.00	38.02
2360	C	ASN	A	295	-79.987	-28.568	81.609	1.00	28.54
2361	O	ASN	A	295	-80.899	-29.110	81.017	1.00	27.88
2362	N	TYR	A	296	-79.897	-28.569	82.934	1.00	29.00
2363	CA	TYR	A	296	-80.815	-29.347	83.740	1.00	29.04
2364	CB	TYR	A	296	-80.213	-30.727	83.982	1.00	29.11
2365	CG	TYR	A	296	-81.156	-31.715	84.629	1.00	30.85
2366	CD1	TYR	A	296	-81.991	-32.509	83.861	1.00	32.89
2367	CE1	TYR	A	296	-82.836	-33.440	84.450	1.00	33.67
2368	CZ	TYR	A	296	-82.840	-33.561	85.817	1.00	34.54
2369	OH	TYR	A	296	-83.671	-34.467	86.421	1.00	37.48
2370	CE2	TYR	A	296	-82.019	-32.784	86.590	1.00	32.41
2371	CD2	TYR	A	296	-81.187	-31.874	85.999	1.00	31.07
2372	C	TYR	A	296	-81.060	-28.690	85.076	1.00	28.70
2373	O	TYR	A	296	-80.162	-28.592	85.900	1.00	29.09
2374	N	SER	A	297	-82.287	-28.272	85.313	1.00	28.63
2375	CA	SER	A	297	-82.616	-27.615	86.566	1.00	29.06
2376	CB	SER	A	297	-82.919	-26.147	86.316	1.00	28.05
2377	OG	SER	A	297	-83.933	-26.044	85.343	1.00	29.76
2378	C	SER	A	297	-83.822	-28.304	87.163	1.00	29.00
2379	O	SER	A	297	-84.625	-28.875	86.445	1.00	29.64
2380	N	VAL	A	298	-83.955	-28.260	88.478	1.00	29.88
2381	CA	VAL	A	298	-85.105	-28.897	89.118	1.00	30.60
2382	CB	VAL	A	298	-84.704	-30.153	89.923	1.00	30.18
2383	CG1	VAL	A	298	-84.147	-31.222	89.018	1.00	30.05
2384	CG2	VAL	A	298	-85.915	-30.714	90.653	1.00	31.51
2385	C	VAL	A	298	-85.761	-27.916	90.062	1.00	31.14
2386	O	VAL	A	298	-85.074	-27.194	90.772	1.00	30.60
2387	N	MET	A	299	-87.089	-27.881	90.062	1.00	32.41

FIGURE 3 AU

A	B	C	D	E	F	G	H	I	J
2388	CA	MET	A	299	-87.798	-27.045	91.009	1.00	34.10
2389	CB	MET	A	299	-88.944	-26.253	90.373	1.00	33.77
2390	CG	MET	A	299	-89.640	-25.335	91.396	1.00	34.32
2391	SD	MET	A	299	-91.132	-24.482	90.826	1.00	37.41
2392	CE	MET	A	299	-92.237	-25.756	90.878	1.00	38.42
2393	C	MET	A	299	-88.365	-27.877	92.148	1.00	35.43
2394	O	MET	A	299	-89.218	-28.731	91.934	1.00	35.56
2395	N	ASP	A	300	-87.899	-27.617	93.360	1.00	36.85
2396	CA	ASP	A	300	-88.474	-28.267	94.519	1.00	38.72
2397	CB	ASP	A	300	-87.435	-28.468	95.595	1.00	38.93
2398	CG	ASP	A	300	-87.085	-29.904	95.785	1.00	39.58
2399	OD1	ASP	A	300	-86.032	-30.175	96.381	1.00	41.59
2400	OD2	ASP	A	300	-87.807	-30.829	95.381	1.00	41.61
2401	C	ASP	A	300	-89.580	-27.428	95.104	1.00	40.22
2402	O	ASP	A	300	-89.564	-26.200	95.022	1.00	40.30
2403	N	ILE	A	301	-90.548	-28.096	95.709	1.00	41.62
2404	CA	ILE	A	301	-91.593	-27.392	96.422	1.00	43.20
2405	CB	ILE	A	301	-92.921	-27.522	95.686	1.00	43.15
2406	CG1	ILE	A	301	-92.843	-26.694	94.394	1.00	43.52
2407	CD1	ILE	A	301	-93.976	-26.916	93.432	1.00	42.31
2408	CG2	ILE	A	301	-94.046	-27.036	96.549	1.00	43.80
2409	C	ILE	A	301	-91.615	-27.910	97.863	1.00	44.31
2410	O	ILE	A	301	-91.919	-29.074	98.139	1.00	44.63
2411	N	CYS	A	302	-91.238	-27.041	98.785	1.00	45.44
2412	CA	CYS	A	302	-91.109	-27.450	100.163	1.00	46.51
2413	CB	CYS	A	302	-89.707	-27.128	100.654	1.00	46.72
2414	SG	CYS	A	302	-88.467	-27.641	99.438	1.00	47.60
2415	C	CYS	A	302	-92.180	-26.867	101.070	1.00	47.22
2416	O	CYS	A	302	-92.363	-25.651	101.150	1.00	46.52
2417	N	ASP	A	303	-92.901	-27.759	101.739	1.00	48.46
2418	CA	ASP	A	303	-93.955	-27.336	102.643	1.00	50.03
2419	CB	ASP	A	303	-95.231	-28.129	102.384	1.00	50.42
2420	CG	ASP	A	303	-95.793	-27.862	101.013	1.00	51.83
2421	OD1	ASP	A	303	-94.992	-27.833	100.055	1.00	53.94
2422	OD2	ASP	A	303	-97.004	-27.653	100.789	1.00	53.82
2423	C	ASP	A	303	-93.541	-27.454	104.093	1.00	50.54
2424	O	ASP	A	303	-92.888	-28.424	104.495	1.00	50.52
2425	N	TYR	A	304	-93.917	-26.454	104.876	1.00	51.37
2426	CA	TYR	A	304	-93.619	-26.471	106.293	1.00	52.61
2427	CB	TYR	A	304	-93.868	-25.100	106.894	1.00	52.69
2428	CG	TYR	A	304	-93.602	-25.048	108.374	1.00	53.78
2429	CD1	TYR	A	304	-92.301	-25.092	108.865	1.00	53.47
2430	CE1	TYR	A	304	-92.053	-25.043	110.209	1.00	54.32
2431	CZ	TYR	A	304	-93.111	-24.954	111.097	1.00	54.60
2432	OH	TYR	A	304	-92.863	-24.905	112.447	1.00	54.22
2433	CE2	TYR	A	304	-94.409	-24.908	110.636	1.00	54.38
2434	CD2	TYR	A	304	-94.649	-24.960	109.282	1.00	53.62
2435	C	TYR	A	304	-94.473	-27.520	107.009	1.00	53.58
2436	O	TYR	A	304	-95.697	-27.576	106.838	1.00	53.17
2437	N	ASP	A	305	-93.818	-28.368	107.793	1.00	54.91
2438	CA	ASP	A	305	-94.521	-29.400	108.548	1.00	56.29

FIGURE 3 AV

A	B	C	D	E	F	G	H	I	J
2439	CB	ASP	A	305	-93.736	-30.711	108.534	1.00	56.44
2440	CG	ASP	A	305	-94.559	-31.884	109.015	1.00	57.27
2441	OD1	ASP	A	305	-95.392	-31.680	109.924	1.00	58.51
2442	OD2	ASP	A	305	-94.445	-33.042	108.547	1.00	57.28
2443	C	ASP	A	305	-94.712	-28.904	109.975	1.00	56.77
2444	O	ASP	A	305	-93.772	-28.914	110.768	1.00	56.54
2445	N	GLU	A	306	-95.932	-28.459	110.273	1.00	57.77
2446	CA	GLU	A	306	-96.286	-27.889	111.578	1.00	58.94
2447	CB	GLU	A	306	-97.781	-27.553	111.642	1.00	59.22
2448	CG	GLU	A	306	-98.092	-26.078	111.493	1.00	60.83
2449	CD	GLU	A	306	-98.939	-25.559	112.638	1.00	63.17
2450	OE1	GLU	A	306	-100.132	-25.929	112.723	1.00	63.52
2451	OE2	GLU	A	306	-98.401	-24.787	113.464	1.00	63.58
2452	C	GLU	A	306	-95.926	-28.739	112.792	1.00	59.24
2453	O	GLU	A	306	-95.613	-28.209	113.854	1.00	59.09
2454	N	SER	A	307	-95.994	-30.057	112.637	1.00	59.75
2455	CA	SER	A	307	-95.678	-30.957	113.734	1.00	60.26
2456	CB	SER	A	307	-96.426	-32.288	113.576	1.00	60.62
2457	OG	SER	A	307	-96.398	-32.746	112.229	1.00	61.31
2458	C	SER	A	307	-94.173	-31.181	113.858	1.00	60.30
2459	O	SER	A	307	-93.601	-30.988	114.931	1.00	60.62
2460	N	SER	A	308	-93.540	-31.575	112.754	1.00	60.12
2461	CA	SER	A	308	-92.102	-31.851	112.717	1.00	59.53
2462	CB	SER	A	308	-91.703	-32.378	111.334	1.00	59.77
2463	OG	SER	A	308	-92.009	-33.753	111.176	1.00	60.20
2464	C	SER	A	308	-91.256	-30.621	113.011	1.00	59.06
2465	O	SER	A	308	-90.133	-30.732	113.512	1.00	59.11
2466	N	GLY	A	309	-91.790	-29.451	112.680	1.00	58.26
2467	CA	GLY	A	309	-91.049	-28.211	112.821	1.00	57.16
2468	C	GLY	A	309	-90.102	-28.063	111.641	1.00	56.45
2469	O	GLY	A	309	-89.250	-27.177	111.614	1.00	56.64
2470	N	ARG	A	310	-90.268	-28.931	110.648	1.00	55.33
2471	CA	ARG	A	310	-89.367	-28.950	109.505	1.00	54.21
2472	CB	ARG	A	310	-88.622	-30.288	109.442	1.00	54.66
2473	CG	ARG	A	310	-87.696	-30.525	110.627	1.00	56.06
2474	CD	ARG	A	310	-86.511	-31.445	110.328	1.00	59.60
2475	NE	ARG	A	310	-86.812	-32.862	110.539	1.00	62.08
2476	CZ	ARG	A	310	-87.479	-33.632	109.680	1.00	63.36
2477	NH1	ARG	A	310	-87.929	-33.132	108.532	1.00	63.22
2478	NH2	ARG	A	310	-87.696	-34.911	109.970	1.00	63.95
2479	C	ARG	A	310	-90.012	-28.641	108.151	1.00	52.85
2480	O	ARG	A	310	-91.212	-28.369	108.057	1.00	52.44
2481	N	TRP	A	311	-89.181	-28.684	107.111	1.00	51.08
2482	CA	TRP	A	311	-89.607	-28.414	105.747	1.00	49.29
2483	CB	TRP	A	311	-88.880	-27.188	105.202	1.00	48.37
2484	CG	TRP	A	311	-89.234	-25.910	105.882	1.00	44.19
2485	CD1	TRP	A	311	-88.713	-25.421	107.051	1.00	40.78
2486	NE1	TRP	A	311	-89.281	-24.206	107.351	1.00	38.90
2487	CE2	TRP	A	311	-90.184	-23.885	106.373	1.00	39.10
2488	CD2	TRP	A	311	-90.178	-24.939	105.430	1.00	40.46
2489	CE3	TRP	A	311	-91.019	-24.845	104.318	1.00	37.66

FIGURE 3 AW

A	B	C	D	E	F	G	H	I	J
2490	CZ3	TRP	A	311	-91.818	-23.734	104.185	1.00	35.16
2491	CH2	TRP	A	311	-91.809	-22.717	105.145	1.00	36.12
2492	CZ2	TRP	A	311	-90.997	-22.771	106.239	1.00	36.29
2493	C	TRP	A	311	-89.332	-29.630	104.860	1.00	49.37
2494	O	TRP	A	311	-88.208	-30.128	104.785	1.00	49.14
2495	N	ASN	A	312	-90.367	-30.120	104.199	1.00	49.46
2496	CA	ASN	A	312	-90.214	-31.296	103.357	1.00	50.06
2497	CB	ASN	A	312	-91.091	-32.442	103.876	1.00	50.41
2498	CG	ASN	A	312	-90.447	-33.202	105.038	1.00	52.10
2499	OD1	ASN	A	312	-90.693	-34.397	105.220	1.00	54.19
2500	ND2	ASN	A	312	-89.620	-32.512	105.826	1.00	53.48
2501	C	ASN	A	312	-90.504	-31.010	101.883	1.00	49.73
2502	O	ASN	A	312	-91.475	-30.332	101.553	1.00	49.59
2503	N	CYS	A	313	-89.643	-31.515	101.005	1.00	49.61
2504	CA	CYS	A	313	-89.821	-31.332	99.565	1.00	49.32
2505	CB	CYS	A	313	-88.549	-30.778	98.921	1.00	49.21
2506	SG	CYS	A	313	-87.730	-29.487	99.875	1.00	48.98
2507	C	CYS	A	313	-90.177	-32.654	98.910	1.00	49.28
2508	O	CYS	A	313	-89.299	-33.428	98.557	1.00	49.40
2509	N	LEU	A	314	-91.470	-32.905	98.751	1.00	49.23
2510	CA	LEU	A	314	-91.948	-34.125	98.122	1.00	49.20
2511	CB	LEU	A	314	-93.471	-34.083	98.003	1.00	49.51
2512	CG	LEU	A	314	-94.318	-34.759	99.090	1.00	50.18
2513	CD1	LEU	A	314	-95.651	-34.033	99.258	1.00	50.99
2514	CD2	LEU	A	314	-93.579	-34.843	100.417	1.00	51.00
2515	C	LEU	A	314	-91.328	-34.364	96.742	1.00	49.05
2516	O	LEU	A	314	-91.574	-33.617	95.801	1.00	48.88
2517	N	VAL	A	315	-90.522	-35.415	96.633	1.00	49.03
2518	CA	VAL	A	315	-89.916	-35.793	95.370	1.00	48.83
2519	CB	VAL	A	315	-89.304	-37.207	95.454	1.00	48.97
2520	CG1	VAL	A	315	-89.162	-37.824	94.070	1.00	49.30
2521	CG2	VAL	A	315	-87.955	-37.170	96.165	1.00	48.31
2522	C	VAL	A	315	-90.969	-35.761	94.272	1.00	48.78
2523	O	VAL	A	315	-90.692	-35.398	93.125	1.00	49.03
2524	N	ALA	A	316	-92.195	-36.107	94.635	1.00	48.31
2525	CA	ALA	A	316	-93.276	-36.135	93.662	1.00	47.94
2526	CB	ALA	A	316	-94.440	-36.957	94.186	1.00	47.92
2527	C	ALA	A	316	-93.762	-34.757	93.246	1.00	47.64
2528	O	ALA	A	316	-94.625	-34.648	92.385	1.00	48.02
2529	N	ARG	A	317	-93.238	-33.707	93.864	1.00	47.02
2530	CA	ARG	A	317	-93.675	-32.359	93.515	1.00	46.41
2531	CB	ARG	A	317	-94.189	-31.620	94.749	1.00	46.68
2532	CG	ARG	A	317	-95.340	-32.365	95.405	1.00	48.25
2533	CD	ARG	A	317	-96.471	-31.507	95.915	1.00	49.42
2534	NE	ARG	A	317	-96.072	-30.749	97.088	1.00	52.62
2535	CZ	ARG	A	317	-96.886	-30.434	98.086	1.00	53.61
2536	NH1	ARG	A	317	-96.420	-29.744	99.114	1.00	53.83
2537	NH2	ARG	A	317	-98.160	-30.812	98.061	1.00	53.37
2538	C	ARG	A	317	-92.588	-31.574	92.780	1.00	45.51
2539	O	ARG	A	317	-92.738	-30.391	92.509	1.00	45.08
2540	N	GLN	A	318	-91.502	-32.268	92.452	1.00	44.70

FIGURE 3 AX

A	B	C	D	E	F	G	H	I	J
2541	CA	GLN	A	318	-90.396	-31.688	91.715	1.00	43.92
2542	CB	GLN	A	318	-89.187	-32.613	91.761	1.00	44.06
2543	CG	GLN	A	318	-88.533	-32.679	93.122	1.00	45.59
2544	CD	GLN	A	318	-87.325	-33.589	93.142	1.00	48.07
2545	OE1	GLN	A	318	-86.775	-33.865	94.211	1.00	49.48
2546	NE2	GLN	A	318	-86.903	-34.056	91.965	1.00	47.11
2547	C	GLN	A	318	-90.791	-31.467	90.273	1.00	43.00
2548	O	GLN	A	318	-91.502	-32.277	89.686	1.00	43.13
2549	N	HIS	A	319	-90.345	-30.349	89.718	1.00	41.42
2550	CA	HIS	A	319	-90.590	-30.044	88.331	1.00	40.05
2551	CB	HIS	A	319	-91.456	-28.811	88.197	1.00	39.89
2552	CG	HIS	A	319	-92.885	-29.064	88.549	1.00	41.96
2553	ND1	HIS	A	319	-93.310	-29.243	89.849	1.00	43.05
2554	CE1	HIS	A	319	-94.612	-29.459	89.856	1.00	42.55
2555	NE2	HIS	A	319	-95.044	-29.439	88.608	1.00	42.08
2556	CD2	HIS	A	319	-93.984	-29.196	87.770	1.00	41.11
2557	C	HIS	A	319	-89.262	-29.871	87.638	1.00	38.85
2558	O	HIS	A	319	-88.434	-29.079	88.056	1.00	38.75
2559	N	ILE	A	320	-89.065	-30.630	86.574	1.00	37.80
2560	CA	ILE	A	320	-87.816	-30.592	85.849	1.00	36.71
2561	CB	ILE	A	320	-87.489	-31.985	85.362	1.00	36.70
2562	CG1	ILE	A	320	-87.306	-32.906	86.570	1.00	36.99
2563	CD1	ILE	A	320	-87.223	-34.374	86.214	1.00	38.96
2564	CG2	ILE	A	320	-86.279	-31.952	84.419	1.00	35.80
2565	C	ILE	A	320	-87.867	-29.637	84.659	1.00	36.24
2566	O	ILE	A	320	-88.852	-29.578	83.938	1.00	34.52
2567	N	GLU	A	321	-86.790	-28.877	84.486	1.00	36.11
2568	CA	GLU	A	321	-86.664	-28.005	83.330	1.00	36.25
2569	CB	GLU	A	321	-86.914	-26.553	83.702	1.00	35.46
2570	CG	GLU	A	321	-87.255	-25.694	82.512	1.00	37.29
2571	CD	GLU	A	321	-87.300	-24.224	82.859	1.00	39.57
2572	OE1	GLU	A	321	-87.550	-23.910	84.050	1.00	41.03
2573	OE2	GLU	A	321	-87.084	-23.388	81.944	1.00	40.17
2574	C	GLU	A	321	-85.253	-28.202	82.786	1.00	36.34
2575	O	GLU	A	321	-84.269	-27.822	83.419	1.00	36.18
2576	N	MET	A	322	-85.176	-28.826	81.618	1.00	35.99
2577	CA	MET	A	322	-83.916	-29.136	80.984	1.00	35.89
2578	CB	MET	A	322	-83.664	-30.649	81.007	1.00	36.45
2579	CG	MET	A	322	-84.751	-31.485	80.328	1.00	40.37
2580	SD	MET	A	322	-84.281	-33.246	80.076	1.00	49.26
2581	CE	MET	A	322	-84.432	-33.862	81.690	1.00	46.43
2582	C	MET	A	322	-83.970	-28.630	79.558	1.00	35.10
2583	O	MET	A	322	-85.007	-28.181	79.084	1.00	34.63
2584	N	SER	A	323	-82.844	-28.683	78.869	1.00	34.71
2585	CA	SER	A	323	-82.823	-28.255	77.475	1.00	34.46
2586	CB	SER	A	323	-82.292	-26.819	77.337	1.00	34.00
2587	OG	SER	A	323	-82.045	-26.519	75.971	1.00	34.22
2588	C	SER	A	323	-81.936	-29.205	76.713	1.00	33.99
2589	O	SER	A	323	-80.885	-29.587	77.196	1.00	33.94
2590	N	THR	A	324	-82.356	-29.575	75.515	1.00	34.42
2591	CA	THR	A	324	-81.558	-30.470	74.684	1.00	34.27

FIGURE 3 AY

A	B	C	D	E	F	G	H	I	J
2592	CB	THR	A	324	-82.457	-31.435	73.901	1.00	34.74
2593	OG1	THR	A	324	-83.248	-30.697	72.960	1.00	35.02
2594	CG2	THR	A	324	-83.496	-32.057	74.843	1.00	34.52
2595	C	THR	A	324	-80.682	-29.691	73.730	1.00	33.76
2596	O	THR	A	324	-79.699	-30.225	73.230	1.00	34.89
2597	N	THR	A	325	-81.006	-28.429	73.474	1.00	32.42
2598	CA	THR	A	325	-80.173	-27.662	72.553	1.00	31.29
2599	CB	THR	A	325	-81.032	-26.912	71.555	1.00	31.37
2600	OG1	THR	A	325	-81.947	-26.079	72.275	1.00	30.65
2601	CG2	THR	A	325	-81.921	-27.889	70.779	1.00	31.29
2602	C	THR	A	325	-79.226	-26.662	73.206	1.00	30.45
2603	O	THR	A	325	-78.405	-26.080	72.522	1.00	30.08
2604	N	GLY	A	326	-79.361	-26.433	74.505	1.00	29.74
2605	CA	GLY	A	326	-78.501	-25.480	75.183	1.00	29.11
2606	C	GLY	A	326	-78.619	-25.523	76.682	1.00	28.22
2607	O	GLY	A	326	-78.786	-26.595	77.250	1.00	29.13
2608	N	TRP	A	327	-78.524	-24.354	77.316	1.00	27.43
2609	CA	TRP	A	327	-78.630	-24.194	78.773	1.00	25.97
2610	CB	TRP	A	327	-77.826	-22.960	79.231	1.00	26.00
2611	CG1	TRP	A	327	-78.213	-21.693	78.496	1.00	23.64
2612	CD1	TRP	A	327	-79.052	-20.721	78.940	1.00	22.57
2613	NE1	TRP	A	327	-79.166	-19.716	78.003	1.00	22.25
2614	CE2	TRP	A	327	-78.399	-20.030	76.913	1.00	23.44
2615	CD2	TRP	A	327	-77.775	-21.272	77.188	1.00	23.16
2616	CE3	TRP	A	327	-76.914	-21.811	76.224	1.00	21.49
2617	CZ3	TRP	A	327	-76.714	-21.108	75.030	1.00	21.48
2618	CH2	TRP	A	327	-77.367	-19.888	74.777	1.00	17.89
2619	CZ2	TRP	A	327	-78.196	-19.322	75.707	1.00	22.30
2620	C	TRP	A	327	-80.095	-23.965	79.056	1.00	25.40
2621	O	TRP	A	327	-80.870	-23.928	78.129	1.00	24.97
2622	N	VAL	A	328	-80.484	-23.809	80.318	1.00	25.17
2623	CA	VAL	A	328	-81.888	-23.555	80.632	1.00	26.17
2624	CB	VAL	A	328	-82.437	-24.498	81.750	1.00	26.11
2625	CG1	VAL	A	328	-81.397	-24.780	82.760	1.00	27.28
2626	CG2	VAL	A	328	-83.660	-23.883	82.430	1.00	26.46
2627	C	VAL	A	328	-82.142	-22.114	81.021	1.00	25.84
2628	O	VAL	A	328	-81.375	-21.534	81.763	1.00	27.58
2629	N	GLY	A	329	-83.232	-21.542	80.525	1.00	26.06
2630	CA	GLY	A	329	-83.569	-20.161	80.813	1.00	25.46
2631	C	GLY	A	329	-82.736	-19.201	79.984	1.00	25.11
2632	O	GLY	A	329	-81.795	-19.611	79.306	1.00	24.50
2633	N	ARG	A	330	-83.071	-17.918	80.041	1.00	25.08
2634	CA	ARG	A	330	-82.344	-16.953	79.236	1.00	25.69
2635	CB	ARG	A	330	-83.132	-15.640	79.068	1.00	26.08
2636	CG	ARG	A	330	-84.259	-15.839	78.002	1.00	26.77
2637	CD	ARG	A	330	-84.897	-14.595	77.357	1.00	26.77
2638	NE	ARG	A	330	-86.029	-14.276	78.180	1.00	32.62
2639	CZ	ARG	A	330	-87.305	-14.271	77.811	1.00	30.25
2640	NH1	ARG	A	330	-88.199	-14.004	78.748	1.00	30.22
2641	NH2	ARG	A	330	-87.687	-14.500	76.553	1.00	27.09
2642	C	ARG	A	330	-80.933	-16.836	79.781	1.00	25.65



FIGURE 3 AZ

A	B	C	D	E	F	G	H	I	J
2643	O	ARG	A	330	-79.972	-17.123	79.092	1.00	24.20
2644	N	PHE	A	331	-80.828	-16.476	81.052	1.00	26.79
2645	CA	PHE	A	331	-79.551	-16.493	81.721	1.00	27.54
2646	CB	PHE	A	331	-79.146	-15.097	82.172	1.00	26.96
2647	CG	PHE	A	331	-78.881	-14.155	81.036	1.00	27.24
2648	CD1	PHE	A	331	-77.597	-13.961	80.559	1.00	27.56
2649	CE1	PHE	A	331	-77.369	-13.070	79.515	1.00	28.57
2650	CZ	PHE	A	331	-78.436	-12.379	78.939	1.00	23.11
2651	CE2	PHE	A	331	-79.679	-12.570	79.402	1.00	24.68
2652	CD2	PHE	A	331	-79.915	-13.447	80.449	1.00	26.99
2653	C	PHE	A	331	-79.621	-17.467	82.892	1.00	28.01
2654	O	PHE	A	331	-78.595	-17.860	83.436	1.00	28.75
2655	N	ARG	A	332	-80.838	-17.869	83.242	1.00	28.70
2656	CA	ARG	A	332	-81.105	-18.772	84.369	1.00	29.58
2657	CB	ARG	A	332	-80.890	-18.059	85.712	1.00	29.72
2658	CG	ARG	A	332	-81.986	-17.027	86.029	1.00	32.07
2659	CD	ARG	A	332	-81.631	-15.977	87.078	1.00	39.24
2660	NE	ARG	A	332	-81.351	-14.675	86.443	1.00	43.86
2661	CZ	ARG	A	332	-80.130	-14.236	86.140	1.00	44.14
2662	NH1	ARG	A	332	-79.063	-14.982	86.421	1.00	43.26
2663	NH2	ARG	A	332	-79.975	-13.053	85.560	1.00	43.53
2664	C	ARG	A	332	-82.569	-19.138	84.260	1.00	29.56
2665	O	ARG	A	332	-83.330	-18.409	83.644	1.00	29.36
2666	N	PRO	A	333	-82.977	-20.250	84.858	1.00	29.98
2667	CA	PRO	A	333	-84.391	-20.636	84.821	1.00	30.22
2668	CB	PRO	A	333	-84.457	-21.870	85.729	1.00	30.22
2669	CG	PRO	A	333	-83.042	-22.375	85.822	1.00	30.06
2670	CD	PRO	A	333	-82.134	-21.218	85.583	1.00	29.85
2671	C	PRO	A	333	-85.234	-19.500	85.387	1.00	30.43
2672	O	PRO	A	333	-84.814	-18.797	86.314	1.00	30.71
2673	N	SER	A	334	-86.404	-19.329	84.803	1.00	30.67
2674	CA	SER	A	334	-87.360	-18.299	85.164	1.00	32.06
2675	CB	SER	A	334	-88.538	-18.335	84.182	1.00	32.08
2676	CG	SER	A	334	-88.289	-17.506	83.072	1.00	34.32
2677	C	SER	A	334	-87.948	-18.501	86.530	1.00	32.20
2678	O	SER	A	334	-88.018	-19.616	87.027	1.00	32.94
2679	N	GLU	A	335	-88.425	-17.411	87.110	1.00	32.23
2680	CA	GLU	A	335	-89.071	-17.466	88.392	1.00	32.12
2681	CB	GLU	A	335	-88.936	-16.108	89.108	1.00	32.09
2682	CG	GLU	A	335	-89.910	-15.015	88.686	1.00	31.46
2683	CD	GLU	A	335	-89.628	-14.410	87.302	1.00	33.59
2684	OE1	GLU	A	335	-88.509	-14.579	86.758	1.00	32.65
2685	OE2	GLU	A	335	-90.546	-13.745	86.754	1.00	33.53
2686	C	GLU	A	335	-90.539	-17.858	88.180	1.00	32.42
2687	O	GLU	A	335	-91.144	-17.504	87.181	1.00	31.80
2688	N	PRO	A	336	-91.096	-18.645	89.090	1.00	32.87
2689	CA	PRO	A	336	-92.519	-18.982	89.014	1.00	33.39
2690	CB	PRO	A	336	-92.611	-20.258	89.846	1.00	33.25
2691	CG	PRO	A	336	-91.500	-20.140	90.835	1.00	32.41
2692	CD	PRO	A	336	-90.419	-19.330	90.208	1.00	32.30
2693	C	PRO	A	336	-93.408	-17.899	89.642	1.00	33.76

FIGURE 3 BA

A	B	C	D	E	F	G	H	I	J
2694	O	PRO	A	336	-92.997	-17.222	90.593	1.00	33.37
2695	N	HIS	A	337	-94.602	-17.732	89.081	1.00	33.63
2696	CA	HIS	A	337	-95.606	-16.851	89.648	1.00	33.97
2697	CB	HIS	A	337	-96.009	-15.782	88.647	1.00	34.05
2698	CG	HIS	A	337	-94.912	-14.796	88.367	1.00	33.96
2699	ND1	HIS	A	337	-93.779	-15.127	87.652	1.00	32.59
2700	CE1	HIS	A	337	-92.981	-14.079	87.591	1.00	31.42
2701	NE2	HIS	A	337	-93.554	-13.083	88.240	1.00	32.74
2702	CD2	HIS	A	337	-94.757	-13.506	88.744	1.00	31.64
2703	C	HIS	A	337	-96.785	-17.726	90.075	1.00	34.33
2704	O	HIS	A	337	-97.471	-18.315	89.247	1.00	34.33
2705	N	PHE	A	338	-96.977	-17.802	91.388	1.00	34.78
2706	CA	PHE	A	338	-97.942	-18.660	92.053	1.00	34.88
2707	CB	PHE	A	338	-97.402	-18.999	93.443	1.00	34.38
2708	CG	PHE	A	338	-96.348	-20.069	93.448	1.00	33.53
2709	CD1	PHE	A	338	-95.016	-19.742	93.607	1.00	30.96
2710	CE1	PHE	A	338	-94.060	-20.719	93.622	1.00	30.30
2711	CZ	PHE	A	338	-94.425	-22.036	93.485	1.00	31.10
2712	CE2	PHE	A	338	-95.749	-22.374	93.356	1.00	30.16
2713	CD2	PHE	A	338	-96.697	-21.404	93.330	1.00	30.81
2714	C	PHE	A	338	-99.318	-18.062	92.269	1.00	35.84
2715	O	PHE	A	338	-99.451	-16.885	92.610	1.00	36.00
2716	N	THR	A	339	-100.342	-18.900	92.121	1.00	36.76
2717	CA	THR	A	339	-101.703	-18.497	92.436	1.00	37.70
2718	CB	THR	A	339	-102.713	-19.592	92.012	1.00	37.86
2719	OG1	THR	A	339	-102.243	-20.875	92.445	1.00	37.50
2720	CG2	THR	A	339	-102.750	-19.739	90.509	1.00	36.53
2721	C	THR	A	339	-101.769	-18.288	93.945	1.00	38.58
2722	O	THR	A	339	-101.026	-18.915	94.693	1.00	38.09
2723	N	LEU	A	340	-102.654	-17.402	94.386	1.00	40.19
2724	CA	LEU	A	340	-102.786	-17.077	95.800	1.00	41.82
2725	CB	LEU	A	340	-104.125	-16.373	96.066	1.00	42.49
2726	CG	LEU	A	340	-104.246	-15.436	97.286	1.00	44.34
2727	CD1	LEU	A	340	-104.163	-13.956	96.871	1.00	46.76
2728	CD2	LEU	A	340	-103.221	-15.745	98.373	1.00	44.87
2729	C	LEU	A	340	-102.673	-18.311	96.683	1.00	42.12
2730	O	LEU	A	340	-101.925	-18.308	97.652	1.00	42.46
2731	N	ASP	A	341	-103.416	-19.365	96.350	1.00	42.85
2732	CA	ASP	A	341	-103.374	-20.612	97.121	1.00	43.36
2733	CB	ASP	A	341	-104.599	-21.486	96.824	1.00	43.86
2734	CG	ASP	A	341	-104.579	-22.085	95.422	1.00	45.87
2735	OD1	ASP	A	341	-105.638	-22.603	94.986	1.00	46.81
2736	OD2	ASP	A	341	-103.557	-22.101	94.693	1.00	48.08
2737	C	ASP	A	341	-102.087	-21.407	96.885	1.00	43.25
2738	O	ASP	A	341	-101.795	-22.373	97.603	1.00	43.43
2739	N	GLY	A	342	-101.340	-21.015	95.858	1.00	42.65
2740	CA	GLY	A	342	-100.061	-21.630	95.561	1.00	42.59
2741	C	GLY	A	342	-100.063	-23.104	95.215	1.00	42.29
2742	O	GLY	A	342	-99.062	-23.789	95.427	1.00	42.17
2743	N	ASN	A	343	-101.172	-23.609	94.694	1.00	41.97
2744	CA	ASN	A	343	-101.206	-25.013	94.292	1.00	42.26

FIGURE 3 BB

A	B	C	D	E	F	G	H	I	J
2745	CB	ASN	A	343	-102.560	-25.638	94.604	1.00	42.41
2746	CG	ASN	A	343	-102.826	-25.720	96.077	1.00	42.16
2747	OD1	ASN	A	343	-102.034	-26.277	96.829	1.00	40.86
2748	ND2	ASN	A	343	-103.942	-25.152	96.504	1.00	42.66
2749	C	ASN	A	343	-100.947	-25.089	92.803	1.00	42.12
2750	O	ASN	A	343	-100.891	-26.164	92.198	1.00	42.06
2751	N	SER	A	344	-100.784	-23.912	92.225	1.00	41.63
2752	CA	SER	A	344	-100.589	-23.788	90.815	1.00	41.38
2753	CB	SER	A	344	-101.937	-23.488	90.185	1.00	41.06
2754	OG	SER	A	344	-101.754	-22.890	88.931	1.00	43.21
2755	C	SER	A	344	-99.613	-22.640	90.563	1.00	40.83
2756	O	SER	A	344	-99.430	-21.781	91.433	1.00	41.01
2757	N	PHE	A	345	-98.980	-22.626	89.389	1.00	39.99
2758	CA	PHE	A	345	-98.089	-21.515	89.041	1.00	39.11
2759	CB	PHE	A	345	-96.775	-21.574	89.824	1.00	38.62
2760	CG	PHE	A	345	-95.877	-22.708	89.430	1.00	38.69
2761	CD1	PHE	A	345	-95.012	-22.585	88.362	1.00	39.64
2762	CE1	PHE	A	345	-94.174	-23.607	88.011	1.00	39.61
2763	CZ	PHE	A	345	-94.201	-24.780	88.721	1.00	41.19
2764	CE2	PHE	A	345	-95.062	-24.915	89.793	1.00	40.32
2765	CD2	PHE	A	345	-95.883	-23.885	90.141	1.00	38.89
2766	C	PHE	A	345	-97.811	-21.336	87.545	1.00	38.58
2767	O	PHE	A	345	-97.966	-22.261	86.732	1.00	38.07
2768	N	TYR	A	346	-97.405	-20.119	87.203	1.00	37.74
2769	CA	TYR	A	346	-97.022	-19.792	85.845	1.00	37.17
2770	CB	TYR	A	346	-97.808	-18.584	85.370	1.00	37.10
2771	CG	TYR	A	346	-99.309	-18.733	85.534	1.00	37.95
2772	CD1	TYR	A	346	-100.101	-19.168	84.484	1.00	36.89
2773	CE1	TYR	A	346	-101.466	-19.299	84.627	1.00	37.37
2774	CZ	TYR	A	346	-102.062	-18.996	85.832	1.00	38.06
2775	OH	TYR	A	346	-103.432	-19.134	85.977	1.00	37.64
2776	CE2	TYR	A	346	-101.300	-18.569	86.894	1.00	37.43
2777	CD2	TYR	A	346	-99.932	-18.432	86.742	1.00	38.88
2778	C	TYR	A	346	-95.530	-19.489	85.795	1.00	36.89
2779	O	TYR	A	346	-94.988	-18.854	86.707	1.00	36.84
2780	N	LYS	A	347	-94.852	-20.020	84.779	1.00	36.40
2781	CA	LYS	A	347	-93.465	-19.644	84.497	1.00	35.95
2782	CB	LYS	A	347	-92.414	-20.410	85.313	1.00	36.20
2783	CG	LYS	A	347	-92.486	-21.884	85.218	1.00	37.74
2784	CD	LYS	A	347	-91.106	-22.494	85.091	1.00	38.65
2785	CE	LYS	A	347	-90.068	-21.885	85.997	1.00	39.61
2786	NZ	LYS	A	347	-88.672	-22.327	85.572	1.00	38.56
2787	C	LYS	A	347	-93.157	-19.717	83.017	1.00	35.02
2788	O	LYS	A	347	-93.727	-20.509	82.285	1.00	35.33
2789	N	ILE	A	348	-92.265	-18.853	82.582	1.00	34.11
2790	CA	ILE	A	348	-91.862	-18.819	81.193	1.00	33.67
2791	CB	ILE	A	348	-91.230	-17.448	80.894	1.00	33.81
2792	CG1	ILE	A	348	-92.251	-16.348	81.224	1.00	31.92
2793	CD1	ILE	A	348	-91.740	-14.952	81.028	1.00	31.88
2794	CG2	ILE	A	348	-90.719	-17.392	79.449	1.00	33.28
2795	C	ILE	A	348	-90.873	-19.941	80.924	1.00	33.21

FIGURE 3 BC

A	B	C	D	E	F	G	H	I	J
2796	O	ILE	A	348	-89.927	-20.097	81.665	1.00	32.34
2797	N	ILE	A	349	-91.135	-20.753	79.903	1.00	33.04
2798	CA	ILE	A	349	-90.210	-21.816	79.501	1.00	33.61
2799	CB	ILE	A	349	-90.548	-23.176	80.157	1.00	33.58
2800	CG1	ILE	A	349	-91.881	-23.716	79.650	1.00	34.71
2801	CD1	ILE	A	349	-92.226	-25.061	80.207	1.00	35.03
2802	CG2	ILE	A	349	-90.598	-23.043	81.680	1.00	35.71
2803	C	ILE	A	349	-90.279	-21.916	77.998	1.00	33.01
2804	O	ILE	A	349	-91.234	-21.434	77.401	1.00	32.93
2805	N	SER	A	350	-89.267	-22.484	77.364	1.00	32.79
2806	CA	SER	A	350	-89.350	-22.571	75.918	1.00	33.90
2807	CB	SER	A	350	-87.979	-22.676	75.246	1.00	33.49
2808	OG	SER	A	350	-87.082	-23.311	76.112	1.00	36.71
2809	C	SER	A	350	-90.286	-23.695	75.495	1.00	33.70
2810	O	SER	A	350	-90.244	-24.805	76.014	1.00	32.51
2811	N	ASN	A	351	-91.143	-23.384	74.546	1.00	34.29
2812	CA	ASN	A	351	-92.076	-24.373	74.092	1.00	35.48
2813	CB	ASN	A	351	-93.260	-23.708	73.405	1.00	35.01
2814	CG	ASN	A	351	-92.873	-23.061	72.120	1.00	34.86
2815	OD1	ASN	A	351	-91.799	-23.339	71.587	1.00	33.30
2816	ND2	ASN	A	351	-93.736	-22.187	71.605	1.00	32.56
2817	C	ASN	A	351	-91.404	-25.389	73.174	1.00	36.63
2818	O	ASN	A	351	-90.170	-25.466	73.081	1.00	36.74
2819	N	GLU	A	352	-92.235	-26.170	72.501	1.00	37.65
2820	CA	GLU	A	352	-91.763	-27.210	71.608	1.00	38.55
2821	CB	GLU	A	352	-92.931	-28.132	71.208	1.00	39.06
2822	CG	GLU	A	352	-93.957	-27.515	70.264	1.00	41.38
2823	CD	GLU	A	352	-94.840	-26.444	70.910	1.00	46.16
2824	OE1	GLU	A	352	-95.497	-25.706	70.138	1.00	45.81
2825	OE2	GLU	A	352	-94.890	-26.335	72.175	1.00	47.75
2826	C	GLU	A	352	-91.058	-26.629	70.373	1.00	38.16
2827	O	GLU	A	352	-90.167	-27.272	69.813	1.00	38.50
2828	N	GLU	A	353	-91.453	-25.425	69.958	1.00	37.12
2829	CA	GLU	A	353	-90.826	-24.766	68.818	1.00	36.69
2830	CB	GLU	A	353	-91.739	-23.695	68.189	1.00	37.21
2831	CG	GLU	A	353	-93.211	-23.990	67.932	1.00	40.63
2832	CD	GLU	A	353	-93.980	-22.710	67.572	1.00	44.93
2833	OE1	GLU	A	353	-94.581	-22.664	66.481	1.00	46.68
2834	OE2	GLU	A	353	-93.976	-21.730	68.374	1.00	46.88
2835	C	GLU	A	353	-89.572	-24.010	69.262	1.00	35.39
2836	O	GLU	A	353	-88.890	-23.403	68.442	1.00	35.44
2837	N	GLY	A	354	-89.302	-23.989	70.559	1.00	33.96
2838	CA	GLY	A	354	-88.195	-23.201	71.071	1.00	32.44
2839	C	GLY	A	354	-88.505	-21.733	71.367	1.00	31.46
2840	O	GLY	A	354	-87.591	-20.940	71.593	1.00	30.85
2841	N	TYR	A	355	-89.778	-21.345	71.339	1.00	30.91
2842	CA	TYR	A	355	-90.122	-19.981	71.726	1.00	30.80
2843	CB	TYR	A	355	-91.209	-19.401	70.829	1.00	30.63
2844	CG	TYR	A	355	-90.695	-19.107	69.445	1.00	32.02
2845	CD1	TYR	A	355	-90.762	-20.063	68.434	1.00	32.17
2846	CE1	TYR	A	355	-90.278	-19.799	67.179	1.00	31.62

FIGURE 3 BD

A	B	C	D	E	F	G	H	I	J
2847	CZ	TYR	A	355	-89.707	-18.571	66.920	1.00	31.90
2848	OH	TYR	A	355	-89.213	-18.276	65.670	1.00	33.67
2849	CE2	TYR	A	355	-89.625	-17.622	67.900	1.00	32.64
2850	CD2	TYR	A	355	-90.111	-17.893	69.154	1.00	32.64
2851	C	TYR	A	355	-90.508	-19.943	73.206	1.00	30.34
2852	O	TYR	A	355	-91.203	-20.837	73.693	1.00	30.13
2853	N	ARG	A	356	-90.030	-18.934	73.927	1.00	29.55
2854	CA	ARG	A	356	-90.288	-18.856	75.370	1.00	29.53
2855	CB	ARG	A	356	-89.219	-18.017	76.081	1.00	29.51
2856	CG	ARG	A	356	-88.022	-18.853	76.506	1.00	29.63
2857	CD	ARG	A	356	-86.716	-18.084	76.730	1.00	26.56
2858	NE	ARG	A	356	-85.607	-18.871	76.218	1.00	26.34
2859	CZ	ARG	A	356	-85.111	-19.949	76.817	1.00	26.06
2860	NH1	ARG	A	356	-85.589	-20.367	77.982	1.00	24.33
2861	NH2	ARG	A	356	-84.128	-20.614	76.244	1.00	25.83
2862	C	ARG	A	356	-91.684	-18.332	75.665	1.00	29.24
2863	O	ARG	A	356	-92.032	-17.226	75.267	1.00	29.37
2864	N	HIS	A	357	-92.476	-19.131	76.370	1.00	29.34
2865	CA	HIS	A	357	-93.877	-18.794	76.610	1.00	29.87
2866	CB	HIS	A	357	-94.789	-19.475	75.578	1.00	29.04
2867	CG	HIS	A	357	-94.868	-18.755	74.271	1.00	27.31
2868	ND1	HIS	A	357	-95.532	-17.554	74.122	1.00	26.59
2869	CE1	HIS	A	357	-95.428	-17.148	72.868	1.00	25.30
2870	NE2	HIS	A	357	-94.725	-18.044	72.198	1.00	26.82
2871	CD2	HIS	A	357	-94.363	-19.059	73.053	1.00	25.52
2872	C	HIS	A	357	-94.303	-19.205	77.996	1.00	31.03
2873	O	HIS	A	357	-93.626	-19.987	78.650	1.00	31.02
2874	N	ILE	A	358	-95.450	-18.684	78.432	1.00	32.92
2875	CA	ILE	A	358	-95.956	-18.941	79.778	1.00	33.30
2876	CB	ILE	A	358	-96.939	-17.868	80.182	1.00	32.95
2877	CG1	ILE	A	358	-96.295	-16.492	80.092	1.00	32.51
2878	CD1	ILE	A	358	-97.298	-15.334	80.019	1.00	31.79
2879	CG2	ILE	A	358	-97.423	-18.132	81.607	1.00	33.53
2880	C	ILE	A	358	-96.639	-20.289	79.859	1.00	34.76
2881	O	ILE	A	358	-97.518	-20.607	79.068	1.00	34.56
2882	N	CYS	A	359	-96.238	-21.082	80.834	1.00	36.20
2883	CA	CYS	A	359	-96.809	-22.394	80.995	1.00	37.68
2884	CB	CYS	A	359	-95.733	-23.467	80.813	1.00	38.06
2885	SG	CYS	A	359	-96.311	-24.979	80.022	1.00	41.36
2886	C	CYS	A	359	-97.420	-22.443	82.389	1.00	38.10
2887	O	CYS	A	359	-96.846	-21.926	83.348	1.00	37.64
2888	N	TYR	A	360	-98.600	-23.044	82.465	1.00	38.74
2889	CA	TYR	A	360	-99.376	-23.151	83.677	1.00	39.80
2890	CB	TYR	A	360	-100.848	-23.059	83.298	1.00	40.29
2891	CG	TYR	A	360	-101.824	-23.098	84.444	1.00	41.20
2892	CD1	TYR	A	360	-103.034	-23.758	84.315	1.00	40.57
2893	CE1	TYR	A	360	-103.933	-23.804	85.353	1.00	42.25
2894	CZ	TYR	A	360	-103.633	-23.175	86.544	1.00	43.37
2895	OH	TYR	A	360	-104.532	-23.229	87.588	1.00	43.69
2896	CE2	TYR	A	360	-102.435	-22.509	86.696	1.00	42.16
2897	CD2	TYR	A	360	-101.542	-22.472	85.651	1.00	42.27

FIGURE 3 BE

A	B	C	D	E	F	G	H	I	J
2898	C	TYR	A	360	-99.078	-24.481	84.332	1.00	40.54
2899	O	TYR	A	360	-99.267	-25.529	83.738	1.00	41.09
2900	N	PHE	A	361	-98.572	-24.449	85.551	1.00	41.60
2901	CA	PHE	A	361	-98.272	-25.687	86.247	1.00	42.72
2902	CB	PHE	A	361	-96.852	-25.645	86.836	1.00	42.51
2903	CG	PHE	A	361	-95.756	-25.536	85.808	1.00	41.05
2904	CD1	PHE	A	361	-94.860	-26.568	85.625	1.00	41.28
2905	CE1	PHE	A	361	-93.838	-26.467	84.693	1.00	41.21
2906	CZ	PHE	A	361	-93.715	-25.322	83.937	1.00	40.10
2907	CE2	PHE	A	361	-94.603	-24.290	84.116	1.00	38.79
2908	CD2	PHE	A	361	-95.612	-24.397	85.046	1.00	39.46
2909	C	PHE	A	361	-99.262	-25.913	87.381	1.00	43.89
2910	O	PHE	A	361	-99.809	-24.964	87.931	1.00	43.81
2911	N	GLN	A	362	-99.510	-27.175	87.711	1.00	45.58
2912	CA	GLN	A	362	-100.272	-27.499	88.912	1.00	47.47
2913	CB	GLN	A	362	-101.451	-28.440	88.616	1.00	48.12
2914	CG	GLN	A	362	-102.775	-28.051	89.306	1.00	49.81
2915	CD	GLN	A	362	-103.062	-28.830	90.613	1.00	53.36
2916	OE1	GLN	A	362	-102.728	-28.369	91.715	1.00	52.94
2917	NE2	GLN	A	362	-103.704	-29.998	90.483	1.00	53.59
2918	C	GLN	A	362	-99.247	-28.158	89.821	1.00	48.25
2919	O	GLN	A	362	-98.430	-28.974	89.376	1.00	48.02
2920	N	ILE	A	363	-99.252	-27.778	91.087	1.00	49.55
2921	CA	ILE	A	363	-98.246	-28.286	92.008	1.00	51.02
2922	CB	ILE	A	363	-98.629	-27.965	93.479	1.00	51.02
2923	CG1	ILE	A	363	-98.133	-26.571	93.851	1.00	51.54
2924	CD1	ILE	A	363	-96.885	-26.159	93.127	1.00	51.02
2925	CG2	ILE	A	363	-98.007	-28.949	94.436	1.00	50.93
2926	C	ILE	A	363	-98.004	-29.771	91.825	1.00	52.01
2927	O	ILE	A	363	-96.858	-30.214	91.808	1.00	52.17
2928	N	ASP	A	364	-99.084	-30.527	91.633	1.00	53.58
2929	CA	ASP	A	364	-99.014	-31.992	91.612	1.00	54.84
2930	CB	ASP	A	364	-100.112	-32.558	92.521	1.00	55.24
2931	CG	ASP	A	364	-99.788	-32.388	93.981	1.00	56.58
2932	OD1	ASP	A	364	-98.635	-32.680	94.350	1.00	59.18
2933	OD2	ASP	A	364	-100.600	-31.958	94.831	1.00	58.32
2934	C	ASP	A	364	-99.037	-32.757	90.276	1.00	55.38
2935	O	ASP	A	364	-99.183	-33.983	90.298	1.00	55.51
2936	N	LYS	A	365	-98.917	-32.080	89.131	1.00	55.78
2937	CA	LYS	A	365	-98.863	-32.809	87.855	1.00	56.42
2938	CB	LYS	A	365	-100.170	-32.712	87.048	1.00	56.40
2939	CG	LYS	A	365	-100.577	-31.309	86.667	1.00	57.92
2940	CD	LYS	A	365	-101.169	-31.221	85.252	1.00	60.34
2941	CE	LYS	A	365	-102.600	-31.746	85.151	1.00	61.89
2942	NZ	LYS	A	365	-102.681	-33.100	84.496	1.00	62.69
2943	C	LYS	A	365	-97.652	-32.444	86.992	1.00	56.62
2944	O	LYS	A	365	-97.321	-31.265	86.818	1.00	57.24
2945	N	LYS	A	366	-97.006	-33.465	86.437	1.00	56.42
2946	CA	LYS	A	366	-95.798	-33.277	85.641	1.00	55.99
2947	CB	LYS	A	366	-95.240	-34.629	85.170	1.00	56.58
2948	CG	LYS	A	366	-94.036	-34.533	84.209	1.00	57.83

FIGURE 3 BF

A	B	C	D	E	F	G	H	I	J
2949	CD	LYS	A	366	-92.819	-33.841	84.852	1.00	59.89
2950	CE	LYS	A	366	-92.654	-32.382	84.393	1.00	60.92
2951	NZ	LYS	A	366	-91.681	-31.585	85.205	1.00	60.11
2952	C	LYS	A	366	-95.952	-32.344	84.447	1.00	55.08
2953	O	LYS	A	366	-95.009	-31.666	84.068	1.00	55.04
2954	N	ASP	A	367	-97.128	-32.281	83.848	1.00	54.12
2955	CA	ASP	A	367	-97.211	-31.500	82.619	1.00	52.94
2956	CB	ASP	A	367	-97.631	-32.379	81.445	1.00	53.37
2957	CG	ASP	A	367	-96.519	-33.310	81.006	1.00	54.80
2958	OD1	ASP	A	367	-96.712	-34.545	81.071	1.00	55.44
2959	OD2	ASP	A	367	-95.408	-32.888	80.595	1.00	57.04
2960	C	ASP	A	367	-98.010	-30.203	82.673	1.00	51.72
2961	O	ASP	A	367	-99.181	-30.177	83.053	1.00	51.87
2962	N	CYS	A	368	-97.349	-29.129	82.263	1.00	49.45
2963	CA	CYS	A	368	-97.957	-27.827	82.275	1.00	47.42
2964	CB	CYS	A	368	-96.888	-26.771	82.554	1.00	47.41
2965	SG	CYS	A	368	-95.730	-26.542	81.198	1.00	46.58
2966	C	CYS	A	368	-98.619	-27.556	80.938	1.00	46.20
2967	O	CYS	A	368	-98.368	-28.249	79.948	1.00	45.93
2968	N	THR	A	369	-99.490	-26.559	80.907	1.00	44.12
2969	CA	THR	A	369	-100.088	-26.180	79.642	1.00	42.61
2970	CB	THR	A	369	-101.619	-26.518	79.577	1.00	42.64
2971	OG1	THR	A	369	-102.392	-25.353	79.264	1.00	42.69
2972	CG2	THR	A	369	-102.149	-26.942	80.929	1.00	43.54
2973	C	THR	A	369	-99.712	-24.733	79.317	1.00	41.02
2974	O	THR	A	369	-99.563	-23.908	80.203	1.00	40.88
2975	N	PHE	A	370	-99.482	-24.462	78.045	1.00	39.16
2976	CA	PHE	A	370	-99.060	-23.150	77.607	1.00	37.31
2977	CB	PHE	A	370	-98.248	-23.272	76.310	1.00	37.15
2978	CG	PHE	A	370	-96.838	-23.766	76.511	1.00	34.73
2979	CD1	PHE	A	370	-95.844	-22.905	76.967	1.00	33.48
2980	CE1	PHE	A	370	-94.530	-23.352	77.158	1.00	33.31
2981	CZ	PHE	A	370	-94.208	-24.678	76.875	1.00	32.49
2982	CE2	PHE	A	370	-95.201	-25.543	76.416	1.00	32.47
2983	CD2	PHE	A	370	-96.505	-25.079	76.233	1.00	33.08
2984	C	PHE	A	370	-100.268	-22.270	77.372	1.00	37.01
2985	O	PHE	A	370	-101.214	-22.663	76.673	1.00	36.86
2986	N	ILE	A	371	-100.246	-21.068	77.938	1.00	36.08
2987	CA	ILE	A	371	-101.362	-20.156	77.733	1.00	35.33
2988	CB	ILE	A	371	-101.798	-19.484	79.045	1.00	35.35
2989	CG1	ILE	A	371	-100.774	-18.452	79.500	1.00	35.72
2990	CD1	ILE	A	371	-101.094	-17.846	80.831	1.00	33.45
2991	CG2	ILE	A	371	-101.933	-20.517	80.118	1.00	36.12
2992	C	ILE	A	371	-101.061	-19.154	76.637	1.00	34.47
2993	O	ILE	A	371	-101.967	-18.464	76.156	1.00	34.72
2994	N	THR	A	372	-99.796	-19.073	76.238	1.00	33.71
2995	CA	THR	A	372	-99.413	-18.250	75.081	1.00	33.23
2996	CB	THR	A	372	-98.559	-17.026	75.457	1.00	33.14
2997	OG1	THR	A	372	-97.327	-17.458	76.046	1.00	31.70
2998	CG2	THR	A	372	-99.232	-16.189	76.529	1.00	33.50
2999	C	THR	A	372	-98.647	-19.107	74.084	1.00	33.04

FIGURE 3 BG

A	B	C	D	E	F	G	H	I	J
3000	O	THR	A	372	-98.098	-20.149	74.442	1.00	32.62
3001	N	LYS	A	373	-98.605	-18.642	72.842	1.00	33.13
3002	CA	LYS	A	373	-97.946	-19.348	71.751	1.00	33.71
3003	CB	LYS	A	373	-98.864	-20.463	71.236	1.00	34.69
3004	CG	LYS	A	373	-98.515	-21.832	71.757	1.00	37.34
3005	CD	LYS	A	373	-97.573	-22.584	70.808	1.00	40.07
3006	CE	LYS	A	373	-97.611	-24.076	71.129	1.00	41.29
3007	NZ	LYS	A	373	-97.392	-24.331	72.596	1.00	39.51
3008	C	LYS	A	373	-97.695	-18.387	70.611	1.00	32.96
3009	O	LYS	A	373	-98.313	-17.327	70.532	1.00	33.22
3010	N	GLY	A	374	-96.811	-18.761	69.705	1.00	32.47
3011	CA	GLY	A	374	-96.525	-17.923	68.550	1.00	31.99
3012	C	GLY	A	374	-95.031	-17.795	68.293	1.00	31.37
3013	O	GLY	A	374	-94.226	-18.208	69.110	1.00	31.20
3014	N	THR	A	375	-94.658	-17.233	67.154	1.00	30.90
3015	CA	THR	A	375	-93.246	-17.004	66.875	1.00	30.93
3016	CB	THR	A	375	-92.924	-17.143	65.362	1.00	30.63
3017	OG1	THR	A	375	-93.906	-16.440	64.590	1.00	31.31
3018	CG2	THR	A	375	-93.075	-18.619	64.906	1.00	30.29
3019	C	THR	A	375	-92.865	-15.625	67.393	1.00	30.34
3020	O	THR	A	375	-92.659	-14.707	66.623	1.00	30.61
3021	N	TRP	A	376	-92.856	-15.498	68.715	1.00	29.89
3022	CA	TRP	A	376	-92.439	-14.299	69.434	1.00	29.59
3023	CB	TRP	A	376	-93.478	-13.173	69.372	1.00	29.71
3024	CG	TRP	A	376	-94.880	-13.619	69.599	1.00	30.29
3025	CD1	TRP	A	376	-95.776	-14.017	68.647	1.00	29.32
3026	NE1	TRP	A	376	-96.965	-14.362	69.241	1.00	28.96
3027	CE2	TRP	A	376	-96.862	-14.203	70.594	1.00	27.80
3028	CD2	TRP	A	376	-95.561	-13.728	70.860	1.00	29.24
3029	CE3	TRP	A	376	-95.201	-13.473	72.190	1.00	28.12
3030	CZ3	TRP	A	376	-96.126	-13.695	73.186	1.00	27.35
3031	CH2	TRP	A	376	-97.421	-14.160	72.884	1.00	28.74
3032	CZ2	TRP	A	376	-97.804	-14.412	71.595	1.00	29.31
3033	C	TRP	A	376	-92.210	-14.786	70.859	1.00	29.40
3034	O	TRP	A	376	-92.395	-15.971	71.140	1.00	28.98
3035	N	GLU	A	377	-91.770	-13.912	71.755	1.00	29.21
3036	CA	GLU	A	377	-91.496	-14.386	73.113	1.00	29.11
3037	CB	GLU	A	377	-89.988	-14.611	73.336	1.00	28.79
3038	CG	GLU	A	377	-89.448	-15.849	72.627	1.00	28.35
3039	CD	GLU	A	377	-88.088	-16.324	73.120	1.00	29.91
3040	OE1	GLU	A	377	-87.752	-17.495	72.827	1.00	29.47
3041	OE2	GLU	A	377	-87.343	-15.542	73.778	1.00	28.67
3042	C	GLU	A	377	-92.099	-13.561	74.240	1.00	28.79
3043	O	GLU	A	377	-92.302	-12.354	74.116	1.00	29.25
3044	N	VAL	A	378	-92.412	-14.237	75.332	1.00	28.38
3045	CA	VAL	A	378	-92.837	-13.569	76.541	1.00	27.65
3046	CB	VAL	A	378	-93.646	-14.519	77.439	1.00	27.88
3047	CG1	VAL	A	378	-93.804	-13.925	78.830	1.00	26.50
3048	CG2	VAL	A	378	-95.027	-14.836	76.800	1.00	26.31
3049	C	VAL	A	378	-91.562	-13.147	77.275	1.00	27.70
3050	O	VAL	A	378	-90.718	-13.976	77.593	1.00	27.32



FIGURE 3 BH

A	B	C	D	E	F	G	H	I	J
3051	N	ILE	A	379	-91.406	-11.854	77.523	1.00	27.85
3052	CA	ILE	A	379	-90.224	-11.362	78.202	1.00	27.66
3053	CB	ILE	A	379	-90.085	-9.875	77.966	1.00	27.68
3054	CG1	ILE	A	379	-90.094	-9.569	76.475	1.00	27.06
3055	CD1	ILE	A	379	-88.982	-10.254	75.698	1.00	27.23
3056	CG2	ILE	A	379	-88.821	-9.343	78.633	1.00	27.37
3057	C	ILE	A	379	-90.352	-11.628	79.691	1.00	28.64
3058	O	ILE	A	379	-89.436	-12.159	80.328	1.00	28.55
3059	N	GLY	A	380	-91.491	-11.252	80.259	1.00	29.04
3060	CA	GLY	A	380	-91.688	-11.466	81.676	1.00	30.14
3061	C	GLY	A	380	-93.133	-11.491	82.135	1.00	31.28
3062	O	GLY	A	380	-94.006	-10.891	81.518	1.00	31.31
3063	N	ILE	A	381	-93.390	-12.246	83.199	1.00	32.45
3064	CA	ILE	A	381	-94.683	-12.201	83.851	1.00	33.24
3065	CB	ILE	A	381	-94.985	-13.501	84.587	1.00	33.27
3066	CG1	ILE	A	381	-95.241	-14.628	83.585	1.00	33.10
3067	CD1	ILE	A	381	-95.018	-16.022	84.135	1.00	31.40
3068	CG2	ILE	A	381	-96.196	-13.313	85.485	1.00	32.88
3069	C	ILE	A	381	-94.551	-11.063	84.847	1.00	33.97
3070	O	ILE	A	381	-93.729	-11.109	85.766	1.00	33.63
3071	N	GLU	A	382	-95.374	-10.046	84.658	1.00	34.75
3072	CA	GLU	A	382	-95.340	-8.857	85.480	1.00	35.69
3073	CB	GLU	A	382	-95.641	-7.656	84.590	1.00	35.50
3074	CG	GLU	A	382	-94.684	-7.593	83.411	1.00	35.79
3075	CD	GLU	A	382	-93.226	-7.560	83.859	1.00	37.37
3076	OE1	GLU	A	382	-92.872	-6.704	84.701	1.00	36.22
3077	OE2	GLU	A	382	-92.431	-8.411	83.392	1.00	38.76
3078	C	GLU	A	382	-96.282	-8.924	86.694	1.00	36.12
3079	O	GLU	A	382	-96.006	-8.354	87.758	1.00	35.75
3080	N	ALA	A	383	-97.392	-9.631	86.550	1.00	36.81
3081	CA	ALA	A	383	-98.295	-9.773	87.689	1.00	36.98
3082	CB	ALA	A	383	-98.881	-8.420	88.082	1.00	36.65
3083	C	ALA	A	383	-99.405	-10.749	87.404	1.00	37.31
3084	O	ALA	A	383	-99.725	-11.042	86.253	1.00	37.00
3085	N	LEU	A	384	-99.989	-11.267	88.469	1.00	38.15
3086	CA	LEU	A	384	-101.144	-12.118	88.310	1.00	39.28
3087	CB	LEU	A	384	-100.753	-13.589	88.239	1.00	39.69
3088	CG	LEU	A	384	-100.874	-14.284	89.581	1.00	39.71
3089	CD1	LEU	A	384	-100.766	-15.788	89.460	1.00	37.20
3090	CD2	LEU	A	384	-99.805	-13.713	90.476	1.00	42.83
3091	C	LEU	A	384	-102.148	-11.884	89.434	1.00	39.71
3092	O	LEU	A	384	-101.793	-11.740	90.608	1.00	39.17
3093	N	THR	A	385	-103.409	-11.817	89.048	1.00	40.18
3094	CA	THR	A	385	-104.482	-11.699	90.010	1.00	40.86
3095	CB	THR	A	385	-105.344	-10.502	89.674	1.00	40.38
3096	OG1	THR	A	385	-105.753	-10.581	88.300	1.00	39.61
3097	CG2	THR	A	385	-104.496	-9.244	89.719	1.00	39.99
3098	C	THR	A	385	-105.275	-12.995	89.891	1.00	41.83
3099	O	THR	A	385	-104.813	-13.945	89.263	1.00	41.94
3100	N	SER	A	386	-106.461	-13.041	90.486	1.00	42.59
3101	CA	SER	A	386	-107.291	-14.228	90.383	1.00	43.17

FIGURE 3 BI

A	B	C	D	E	F	G	H	I	J
3102	CB	SER	A	386	-108.434	-14.179	91.393	1.00	43.36
3103	OG	SER	A	386	-109.495	-13.395	90.883	1.00	44.75
3104	C	SER	A	386	-107.885	-14.310	88.985	1.00	43.23
3105	O	SER	A	386	-108.147	-15.401	88.492	1.00	43.30
3106	N	ASP	A	387	-108.074	-13.151	88.352	1.00	43.17
3107	CA	ASP	A	387	-108.713	-13.063	87.040	1.00	43.23
3108	CB	ASP	A	387	-109.678	-11.866	87.012	1.00	43.76
3109	CG	ASP	A	387	-110.811	-11.981	88.036	1.00	46.84
3110	OD1	ASP	A	387	-111.477	-13.043	88.092	1.00	47.87
3111	OD2	ASP	A	387	-111.118	-11.046	88.825	1.00	49.98
3112	C	ASP	A	387	-107.768	-12.929	85.834	1.00	42.74
3113	O	ASP	A	387	-108.107	-13.366	84.733	1.00	42.73
3114	N	TYR	A	388	-106.610	-12.294	86.028	1.00	42.04
3115	CA	TYR	A	388	-105.704	-11.982	84.922	1.00	41.04
3116	CB	TYR	A	388	-105.918	-10.546	84.456	1.00	41.59
3117	CG	TYR	A	388	-107.268	-10.254	83.845	1.00	43.68
3118	CD1	TYR	A	388	-108.245	-9.574	84.566	1.00	44.79
3119	CE1	TYR	A	388	-109.486	-9.291	84.002	1.00	46.09
3120	CZ	TYR	A	388	-109.756	-9.689	82.705	1.00	46.54
3121	OH	TYR	A	388	-110.995	-9.415	82.144	1.00	47.67
3122	CE2	TYR	A	388	-108.797	-10.364	81.973	1.00	45.96
3123	CD2	TYR	A	388	-107.565	-10.639	82.537	1.00	44.99
3124	C	TYR	A	388	-104.206	-12.142	85.201	1.00	40.05
3125	O	TYR	A	388	-103.714	-11.973	86.322	1.00	39.45
3126	N	LEU	A	389	-103.492	-12.444	84.128	1.00	38.96
3127	CA	LEU	A	389	-102.057	-12.602	84.141	1.00	37.49
3128	CB	LEU	A	389	-101.694	-13.963	83.556	1.00	37.55
3129	CG	LEU	A	389	-100.251	-14.396	83.193	1.00	37.72
3130	CD1	LEU	A	389	-99.461	-13.286	82.493	1.00	35.09
3131	CD2	LEU	A	389	-99.501	-14.931	84.384	1.00	34.39
3132	C	LEU	A	389	-101.581	-11.482	83.248	1.00	36.68
3133	O	LEU	A	389	-102.035	-11.362	82.100	1.00	36.51
3134	N	TYR	A	390	-100.734	-10.610	83.790	1.00	35.56
3135	CA	TYR	A	390	-100.152	-9.537	82.990	1.00	34.84
3136	CB	TYR	A	390	-100.160	-8.216	83.753	1.00	34.98
3137	CG	TYR	A	390	-101.548	-7.768	84.149	1.00	36.76
3138	CD1	TYR	A	390	-102.314	-6.971	83.307	1.00	37.18
3139	CE1	TYR	A	390	-103.579	-6.561	83.671	1.00	37.10
3140	CZ	TYR	A	390	-104.107	-6.960	84.885	1.00	37.72
3141	OH	TYR	A	390	-105.374	-6.569	85.265	1.00	38.83
3142	CE2	TYR	A	390	-103.376	-7.760	85.729	1.00	38.02
3143	CD2	TYR	A	390	-102.099	-8.157	85.359	1.00	37.31
3144	C	TYR	A	390	-98.725	-9.921	82.584	1.00	33.82
3145	O	TYR	A	390	-97.974	-10.467	83.375	1.00	32.84
3146	N	TYR	A	391	-98.363	-9.653	81.338	1.00	33.20
3147	CA	TYR	A	391	-97.034	-10.012	80.877	1.00	32.69
3148	CB	TYR	A	391	-96.995	-11.454	80.357	1.00	32.36
3149	CG	TYR	A	391	-97.691	-11.673	79.027	1.00	32.00
3150	CD1	TYR	A	391	-97.027	-11.474	77.833	1.00	31.00
3151	CE1	TYR	A	391	-97.656	-11.683	76.617	1.00	32.29
3152	CZ	TYR	A	391	-98.972	-12.095	76.588	1.00	32.79

FIGURE 3 BJ

A	B	C	D	E	F	G	H	I	J
3153	OH	TYR	A	391	-99.612	-12.306	75.378	1.00	33.27
3154	CE2	TYR	A	391	-99.654	-12.295	77.765	1.00	33.23
3155	CD2	TYR	A	391	-99.013	-12.094	78.976	1.00	32.20
3156	C	TYR	A	391	-96.563	-9.085	79.792	1.00	32.29
3157	O	TYR	A	391	-97.361	-8.453	79.099	1.00	32.50
3158	N	ILE	A	392	-95.251	-9.014	79.639	1.00	31.52
3159	CA	ILE	A	392	-94.684	-8.212	78.578	1.00	31.31
3160	CB	ILE	A	392	-93.557	-7.329	79.140	1.00	31.30
3161	CG1	ILE	A	392	-94.180	-6.177	79.933	1.00	31.92
3162	CD1	ILE	A	392	-93.211	-5.162	80.474	1.00	34.62
3163	CG2	ILE	A	392	-92.688	-6.823	78.006	1.00	31.62
3164	C	ILE	A	392	-94.162	-9.167	77.520	1.00	30.76
3165	O	ILE	A	392	-93.658	-10.223	77.860	1.00	31.24
3166	N	SER	A	393	-94.294	-8.812	76.247	1.00	30.16
3167	CA	SER	A	393	-93.789	-9.659	75.182	1.00	29.75
3168	CB	SER	A	393	-94.861	-10.658	74.764	1.00	29.92
3169	OG	SER	A	393	-95.630	-10.120	73.709	1.00	29.63
3170	C	SER	A	393	-93.417	-8.846	73.959	1.00	29.79
3171	O	SER	A	393	-93.829	-7.676	73.826	1.00	29.67
3172	N	ASN	A	394	-92.661	-9.456	73.048	1.00	29.19
3173	CA	ASN	A	394	-92.342	-8.766	71.805	1.00	29.62
3174	CB	ASN	A	394	-90.876	-8.940	71.409	1.00	28.91
3175	CG	ASN	A	394	-90.438	-10.380	71.413	1.00	28.75
3176	OD1	ASN	A	394	-91.266	-11.293	71.323	1.00	29.80
3177	ND2	ASN	A	394	-89.132	-10.601	71.531	1.00	23.61
3178	C	ASN	A	394	-93.246	-9.200	70.654	1.00	30.28
3179	O	ASN	A	394	-92.810	-9.244	69.510	1.00	30.27
3180	N	GLU	A	395	-94.501	-9.513	70.959	1.00	31.07
3181	CA	GLU	A	395	-95.413	-10.010	69.929	1.00	32.27
3182	CB	GLU	A	395	-96.656	-10.646	70.552	1.00	32.41
3183	CG	GLU	A	395	-97.665	-11.121	69.513	1.00	33.91
3184	CD	GLU	A	395	-98.992	-11.565	70.112	1.00	36.35
3185	OE1	GLU	A	395	-99.798	-12.148	69.363	1.00	38.35
3186	OE2	GLU	A	395	-99.242	-11.336	71.320	1.00	35.05
3187	C	GLU	A	395	-95.831	-8.960	68.911	1.00	32.44
3188	O	GLU	A	395	-95.924	-9.246	67.725	1.00	32.39
3189	N	TYR	A	396	-96.046	-7.737	69.372	1.00	32.94
3190	CA	TYR	A	396	-96.538	-6.696	68.492	1.00	34.02
3191	CB	TYR	A	396	-96.678	-5.376	69.238	1.00	34.28
3192	CG	TYR	A	396	-97.530	-4.373	68.514	1.00	35.62
3193	CD1	TYR	A	396	-97.009	-3.156	68.129	1.00	37.19
3194	CE1	TYR	A	396	-97.781	-2.228	67.475	1.00	38.08
3195	CZ	TYR	A	396	-99.097	-2.522	67.206	1.00	39.93
3196	OH	TYR	A	396	-99.869	-1.596	66.549	1.00	43.01
3197	CE2	TYR	A	396	-99.641	-3.733	67.573	1.00	36.99
3198	CD2	TYR	A	396	-98.864	-4.643	68.220	1.00	36.76
3199	C	TYR	A	396	-95.757	-6.485	67.198	1.00	34.70
3200	O	TYR	A	396	-94.589	-6.043	67.195	1.00	34.91
3201	N	LYS	A	397	-96.446	-6.799	66.107	1.00	34.92
3202	CA	LYS	A	397	-95.975	-6.620	64.732	1.00	35.51
3203	CB	LYS	A	397	-95.805	-5.142	64.382	1.00	36.04

FIGURE 3 BK

A	B	C	D	E	F	G	H	I	J
3204	CG	LYS	A	397	-97.085	-4.336	64.631	1.00	37.94
3205	CD	LYS	A	397	-97.278	-3.189	63.634	1.00	43.63
3206	CE	LYS	A	397	-98.408	-3.463	62.632	1.00	46.07
3207	NZ	LYS	A	397	-99.674	-2.736	62.990	1.00	48.66
3208	C	LYS	A	397	-94.769	-7.479	64.362	1.00	34.76
3209	O	LYS	A	397	-94.146	-7.318	63.314	1.00	35.69
3210	N	GLY	A	398	-94.473	-8.432	65.225	1.00	34.51
3211	CA	GLY	A	398	-93.408	-9.378	64.952	1.00	33.09
3212	C	GLY	A	398	-92.027	-8.789	65.139	1.00	31.76
3213	O	GLY	A	398	-91.041	-9.317	64.619	1.00	31.50
3214	N	MET	A	399	-91.968	-7.714	65.918	1.00	30.92
3215	CA	MET	A	399	-90.729	-6.974	66.156	1.00	29.83
3216	CB	MET	A	399	-91.029	-5.475	66.137	1.00	29.98
3217	CG	MET	A	399	-91.629	-5.021	64.837	1.00	29.96
3218	SD	MET	A	399	-92.254	-3.368	64.887	1.00	37.21
3219	CE	MET	A	399	-90.784	-2.469	65.436	1.00	33.01
3220	C	MET	A	399	-90.118	-7.371	67.487	1.00	29.01
3221	O	MET	A	399	-90.572	-6.920	68.538	1.00	28.71
3222	N	PRO	A	400	-89.068	-8.190	67.428	1.00	28.26
3223	CA	PRO	A	400	-88.406	-8.745	68.618	1.00	27.62
3224	CB	PRO	A	400	-87.199	-9.488	68.025	1.00	27.70
3225	CG	PRO	A	400	-87.581	-9.798	66.640	1.00	28.07
3226	CD	PRO	A	400	-88.414	-8.614	66.180	1.00	27.97
3227	C	PRO	A	400	-87.878	-7.677	69.570	1.00	27.75
3228	O	PRO	A	400	-87.707	-7.936	70.780	1.00	27.06
3229	N	GLY	A	401	-87.595	-6.504	69.004	1.00	27.25
3230	CA	GLY	A	401	-86.997	-5.409	69.729	1.00	27.34
3231	C	GLY	A	401	-88.063	-4.491	70.262	1.00	27.51
3232	O	GLY	A	401	-87.769	-3.419	70.752	1.00	28.06
3233	N	GLY	A	402	-89.313	-4.911	70.147	1.00	27.24
3234	CA	GLY	A	402	-90.410	-4.153	70.696	1.00	27.47
3235	C	GLY	A	402	-90.847	-4.818	71.989	1.00	28.19
3236	O	GLY	A	402	-90.546	-5.983	72.236	1.00	28.06
3237	N	ARG	A	403	-91.577	-4.088	72.815	1.00	28.82
3238	CA	ARG	A	403	-91.957	-4.588	74.117	1.00	29.49
3239	CB	ARG	A	403	-90.939	-4.061	75.132	1.00	30.06
3240	CG	ARG	A	403	-90.202	-5.072	75.981	1.00	30.95
3241	CD	ARG	A	403	-89.633	-6.206	75.194	1.00	33.17
3242	NE	ARG	A	403	-88.254	-6.580	75.530	1.00	33.21
3243	CZ	ARG	A	403	-87.362	-6.896	74.597	1.00	33.74
3244	NH1	ARG	A	403	-86.130	-7.249	74.929	1.00	35.28
3245	NH2	ARG	A	403	-87.713	-6.859	73.313	1.00	32.54
3246	C	ARG	A	403	-93.338	-3.999	74.426	1.00	29.90
3247	O	ARG	A	403	-93.527	-2.791	74.312	1.00	29.67
3248	N	ASN	A	404	-94.300	-4.841	74.795	1.00	30.17
3249	CA	ASN	A	404	-95.632	-4.357	75.172	1.00	31.02
3250	CB	ASN	A	404	-96.585	-4.346	73.976	1.00	30.84
3251	CG	ASN	A	404	-96.411	-3.123	73.107	1.00	31.54
3252	OD1	ASN	A	404	-95.945	-3.227	71.993	1.00	34.51
3253	ND2	ASN	A	404	-96.790	-1.962	73.613	1.00	31.54
3254	C	ASN	A	404	-96.296	-5.116	76.309	1.00	30.96

FIGURE 3 BL

A	B	C	D	E	F	G	H	I	J
3255	O	ASN	A	404	-96.097	-6.309	76.468	1.00	31.51
3256	N	LEU	A	405	-97.108	-4.416	77.087	1.00	31.43
3257	CA	LEU	A	405	-97.824	-5.044	78.183	1.00	31.86
3258	CB	LEU	A	405	-98.169	-4.011	79.262	1.00	31.55
3259	CG	LEU	A	405	-99.055	-4.538	80.406	1.00	32.11
3260	CD1	LEU	A	405	-98.305	-5.562	81.269	1.00	29.98
3261	CD2	LEU	A	405	-99.584	-3.421	81.287	1.00	31.87
3262	C	LEU	A	405	-99.100	-5.711	77.681	1.00	32.43
3263	O	LEU	A	405	-99.890	-5.096	76.980	1.00	31.29
3264	N	TYR	A	406	-99.285	-6.978	78.040	1.00	33.78
3265	CA	TYR	A	406	-100.503	-7.697	77.696	1.00	35.09
3266	CB	TYR	A	406	-100.249	-8.855	76.738	1.00	34.76
3267	CG	TYR	A	406	-99.685	-8.475	75.396	1.00	34.78
3268	CD1	TYR	A	406	-100.491	-8.453	74.257	1.00	33.10
3269	CE1	TYR	A	406	-99.964	-8.119	73.025	1.00	33.82
3270	CZ	TYR	A	406	-98.611	-7.819	72.920	1.00	32.85
3271	OH	TYR	A	406	-98.060	-7.478	71.705	1.00	31.33
3272	CE2	TYR	A	406	-97.805	-7.845	74.033	1.00	32.74
3273	CD2	TYR	A	406	-98.337	-8.171	75.256	1.00	33.14
3274	C	TYR	A	406	-101.157	-8.253	78.949	1.00	36.09
3275	O	TYR	A	406	-100.559	-8.302	80.014	1.00	35.94
3276	N	LYS	A	407	-102.399	-8.689	78.793	1.00	37.79
3277	CA	LYS	A	407	-103.172	-9.246	79.887	1.00	39.76
3278	CB	LYS	A	407	-104.129	-8.175	80.361	1.00	39.96
3279	CG	LYS	A	407	-105.278	-8.580	81.224	1.00	41.71
3280	CD	LYS	A	407	-106.415	-7.629	80.904	1.00	43.83
3281	CE	LYS	A	407	-106.940	-6.878	82.132	1.00	47.46
3282	NZ	LYS	A	407	-108.000	-5.875	81.719	1.00	46.10
3283	C	LYS	A	407	-103.909	-10.473	79.347	1.00	40.89
3284	O	LYS	A	407	-104.532	-10.429	78.301	1.00	40.99
3285	N	ILE	A	408	-103.812	-11.592	80.033	1.00	42.46
3286	CA	ILE	A	408	-104.484	-12.776	79.520	1.00	43.24
3287	CB	ILE	A	408	-103.429	-13.860	79.167	1.00	43.09
3288	CG1	ILE	A	408	-104.089	-15.189	78.834	1.00	43.14
3289	CD1	ILE	A	408	-103.228	-16.078	77.948	1.00	43.96
3290	CG2	ILE	A	408	-102.441	-14.017	80.289	1.00	42.69
3291	C	ILE	A	408	-105.575	-13.266	80.478	1.00	43.91
3292	O	ILE	A	408	-105.319	-13.510	81.657	1.00	43.59
3293	N	GLN	A	409	-106.804	-13.364	79.964	1.00	45.17
3294	CA	GLN	A	409	-107.937	-13.837	80.757	1.00	46.28
3295	CB	GLN	A	409	-109.236	-13.845	79.943	1.00	46.51
3296	CG	GLN	A	409	-110.039	-12.546	79.986	1.00	48.80
3297	CD	GLN	A	409	-111.528	-12.792	80.225	1.00	51.08
3298	OE1	GLN	A	409	-112.384	-12.134	79.628	1.00	52.08
3299	NE2	GLN	A	409	-111.834	-13.732	81.107	1.00	51.58
3300	C	GLN	A	409	-107.677	-15.231	81.262	1.00	46.28
3301	O	GLN	A	409	-107.680	-16.175	80.488	1.00	46.64
3302	N	LEU	A	410	-107.459	-15.362	82.562	1.00	46.95
3303	CA	LEU	A	410	-107.187	-16.665	83.160	1.00	47.82
3304	CB	LEU	A	410	-106.892	-16.519	84.655	1.00	47.64
3305	CG	LEU	A	410	-105.435	-16.451	85.140	1.00	48.05

FIGURE 3 BM

A	B	C	D	E	F	G	H	I	J
3306	CD1	LEU	A	410	-104.508	-15.825	84.122	1.00	47.02
3307	CD2	LEU	A	410	-105.342	-15.730	86.480	1.00	47.28
3308	C	LEU	A	410	-108.332	-17.657	82.940	1.00	48.62
3309	O	LEU	A	410	-108.114	-18.871	82.926	1.00	49.20
3310	N	SER	A	411	-109.551	-17.151	82.763	1.00	49.21
3311	CA	SER	A	411	-110.697	-18.041	82.564	1.00	49.64
3312	CB	SER	A	411	-111.998	-17.443	83.113	1.00	49.66
3313	OG	SER	A	411	-112.334	-16.236	82.459	1.00	50.12
3314	C	SER	A	411	-110.852	-18.424	81.109	1.00	49.64
3315	O	SER	A	411	-111.721	-19.220	80.760	1.00	49.77
3316	N	ASP	A	412	-110.004	-17.846	80.264	1.00	49.70
3317	CA	ASP	A	412	-109.974	-18.183	78.844	1.00	49.32
3318	CB	ASP	A	412	-111.249	-17.754	78.129	1.00	49.31
3319	CG	ASP	A	412	-111.118	-17.858	76.631	1.00	49.86
3320	OD1	ASP	A	412	-111.620	-16.960	75.925	1.00	51.20
3321	OD2	ASP	A	412	-110.505	-18.795	76.069	1.00	49.93
3322	C	ASP	A	412	-108.754	-17.587	78.150	1.00	48.90
3323	O	ASP	A	412	-108.737	-16.405	77.808	1.00	48.74
3324	N	TYR	A	413	-107.762	-18.441	77.909	1.00	48.67
3325	CA	TYR	A	413	-106.470	-18.056	77.340	1.00	48.21
3326	CB	TYR	A	413	-105.569	-19.284	77.219	1.00	48.00
3327	CG	TYR	A	413	-105.346	-19.964	78.544	1.00	47.05
3328	CD1	TYR	A	413	-105.400	-19.244	79.728	1.00	45.48
3329	CE1	TYR	A	413	-105.205	-19.862	80.952	1.00	45.07
3330	CZ	TYR	A	413	-104.948	-21.218	81.004	1.00	45.31
3331	OH	TYR	A	413	-104.737	-21.830	82.228	1.00	45.70
3332	CE2	TYR	A	413	-104.885	-21.957	79.841	1.00	45.59
3333	CD2	TYR	A	413	-105.087	-21.329	78.616	1.00	46.71
3334	C	TYR	A	413	-106.501	-17.311	76.013	1.00	48.20
3335	O	TYR	A	413	-105.594	-16.536	75.726	1.00	48.44
3336	N	THR	A	414	-107.520	-17.541	75.197	1.00	47.87
3337	CA	THR	A	414	-107.567	-16.877	73.905	1.00	48.02
3338	CB	THR	A	414	-108.516	-17.616	72.932	1.00	48.47
3339	OG1	THR	A	414	-108.533	-19.021	73.228	1.00	48.81
3340	CG2	THR	A	414	-107.962	-17.563	71.507	1.00	49.08
3341	C	THR	A	414	-107.979	-15.408	74.061	1.00	47.92
3342	O	THR	A	414	-107.921	-14.624	73.104	1.00	47.40
3343	N	LYS	A	415	-108.408	-15.049	75.269	1.00	47.86
3344	CA	LYS	A	415	-108.818	-13.681	75.566	1.00	48.09
3345	CB	LYS	A	415	-109.919	-13.668	76.634	1.00	48.35
3346	CG	LYS	A	415	-111.348	-13.882	76.099	1.00	49.40
3347	CD	LYS	A	415	-112.327	-14.273	77.230	1.00	50.67
3348	CE	LYS	A	415	-113.733	-14.598	76.681	1.00	52.10
3349	NZ	LYS	A	415	-114.681	-15.192	77.678	1.00	50.50
3350	C	LYS	A	415	-107.602	-12.851	76.010	1.00	47.68
3351	O	LYS	A	415	-107.281	-12.758	77.211	1.00	47.60
3352	N	VAL	A	416	-106.923	-12.256	75.034	1.00	46.94
3353	CA	VAL	A	416	-105.718	-11.476	75.315	1.00	46.15
3354	CB	VAL	A	416	-104.464	-12.136	74.718	1.00	46.12
3355	CG1	VAL	A	416	-103.219	-11.347	75.096	1.00	46.22
3356	CG2	VAL	A	416	-104.341	-13.572	75.187	1.00	46.14

FIGURE 3 BN

A	B	C	D	E	F	G	H	I	J
3357	C	VAL	A	416	-105.818	-10.045	74.804	1.00	45.58
3358	O	VAL	A	416	-106.069	-9.810	73.624	1.00	45.12
3359	N	THR	A	417	-105.614	-9.094	75.708	1.00	44.95
3360	CA	THR	A	417	-105.657	-7.682	75.359	1.00	44.73
3361	CB	THR	A	417	-106.527	-6.897	76.374	1.00	44.76
3362	OG1	THR	A	417	-107.715	-7.631	76.693	1.00	46.65
3363	CG2	THR	A	417	-107.050	-5.622	75.752	1.00	45.28
3364	C	THR	A	417	-104.260	-7.097	75.426	1.00	44.13
3365	O	THR	A	417	-103.505	-7.382	76.362	1.00	44.42
3366	N	CYS	A	418	-103.899	-6.289	74.443	1.00	43.39
3367	CA	CYS	A	418	-102.660	-5.559	74.555	1.00	42.51
3368	CB	CYS	A	418	-102.050	-5.243	73.204	1.00	42.80
3369	SG	CYS	A	418	-100.345	-4.653	73.414	1.00	43.32
3370	C	CYS	A	418	-103.005	-4.275	75.271	1.00	42.18
3371	O	CYS	A	418	-103.848	-3.510	74.805	1.00	42.52
3372	N	LEU	A	419	-102.356	-4.030	76.399	1.00	41.41
3373	CA	LEU	A	419	-102.669	-2.859	77.201	1.00	41.03
3374	CB	LEU	A	419	-102.488	-3.161	78.699	1.00	40.49
3375	CG	LEU	A	419	-103.396	-4.295	79.176	1.00	41.05
3376	CD1	LEU	A	419	-103.204	-4.655	80.641	1.00	38.62
3377	CD2	LEU	A	419	-104.864	-3.955	78.871	1.00	41.03
3378	C	LEU	A	419	-101.870	-1.626	76.816	1.00	40.78
3379	O	LEU	A	419	-102.157	-0.536	77.303	1.00	40.62
3380	N	SER	A	420	-100.884	-1.788	75.933	1.00	40.62
3381	CA	SER	A	420	-100.010	-0.669	75.585	1.00	40.10
3382	CB	SER	A	420	-98.646	-0.815	76.277	1.00	39.89
3383	OG	SER	A	420	-97.918	-1.939	75.806	1.00	37.82
3384	C	SER	A	420	-99.796	-0.432	74.105	1.00	40.54
3385	O	SER	A	420	-99.518	0.685	73.700	1.00	40.69
3386	N	CYS	A	421	-99.901	-1.479	73.302	1.00	41.40
3387	CA	CYS	A	421	-99.666	-1.371	71.862	1.00	42.61
3388	CB	CYS	A	421	-100.293	-2.554	71.128	1.00	42.55
3389	SG	CYS	A	421	-99.620	-4.145	71.597	1.00	43.99
3390	C	CYS	A	421	-100.183	-0.113	71.191	1.00	43.15
3391	O	CYS	A	421	-99.529	0.427	70.305	1.00	43.48
3392	N	GLU	A	422	-101.353	0.359	71.597	1.00	43.98
3393	CA	GLU	A	422	-101.996	1.426	70.843	1.00	44.84
3394	CB	GLU	A	422	-103.429	1.022	70.508	1.00	45.47
3395	CG	GLU	A	422	-103.726	1.045	69.036	1.00	48.80
3396	CD	GLU	A	422	-103.109	-0.147	68.344	1.00	52.97
3397	OE1	GLU	A	422	-103.637	-1.271	68.535	1.00	54.91
3398	OE2	GLU	A	422	-102.100	0.039	67.627	1.00	53.96
3399	C	GLU	A	422	-102.050	2.752	71.539	1.00	44.63
3400	O	GLU	A	422	-102.714	3.669	71.062	1.00	44.84
3401	N	LEU	A	423	-101.379	2.863	72.673	1.00	44.63
3402	CA	LEU	A	423	-101.424	4.104	73.422	1.00	44.36
3403	CB	LEU	A	423	-100.722	3.945	74.756	1.00	43.74
3404	CG	LEU	A	423	-101.432	2.861	75.547	1.00	43.47
3405	CD1	LEU	A	423	-100.700	2.545	76.833	1.00	42.34
3406	CD2	LEU	A	423	-102.885	3.275	75.831	1.00	45.13
3407	C	LEU	A	423	-100.839	5.240	72.609	1.00	44.45

FIGURE 3 BO

A	B	C	D	E	F	G	H	I	J
3408	O	LEU	A	423	-101.376	6.355	72.594	1.00	44.82
3409	N	ASN	A	424	-99.760	4.937	71.903	1.00	44.24
3410	CA	ASN	A	424	-99.068	5.917	71.077	1.00	44.12
3411	CB	ASN	A	424	-98.281	6.898	71.945	1.00	43.83
3412	CG	ASN	A	424	-98.116	8.260	71.288	1.00	45.15
3413	OD1	ASN	A	424	-97.775	8.360	70.105	1.00	45.08
3414	ND2	ASN	A	424	-98.376	9.320	72.052	1.00	45.29
3415	C	ASN	A	424	-98.120	5.150	70.179	1.00	43.86
3416	O	ASN	A	424	-96.910	5.190	70.369	1.00	44.50
3417	N	PRO	A	425	-98.689	4.421	69.229	1.00	43.43
3418	CA	PRO	A	425	-97.934	3.584	68.293	1.00	43.33
3419	CB	PRO	A	425	-98.988	3.222	67.240	1.00	43.27
3420	CG	PRO	A	425	-100.102	4.181	67.509	1.00	43.80
3421	CD	PRO	A	425	-100.139	4.298	69.002	1.00	43.48
3422	C	PRO	A	425	-96.724	4.217	67.616	1.00	42.94
3423	O	PRO	A	425	-95.832	3.474	67.223	1.00	42.64
3424	N	GLU	A	426	-96.679	5.532	67.465	1.00	42.90
3425	CA	GLU	A	426	-95.533	6.133	66.790	1.00	43.44
3426	CB	GLU	A	426	-95.929	7.421	66.051	1.00	44.34
3427	CG	GLU	A	426	-94.800	8.077	65.250	1.00	47.87
3428	CD	GLU	A	426	-95.015	9.579	65.003	1.00	52.11
3429	OE1	GLU	A	426	-95.896	9.949	64.193	1.00	54.48
3430	OE2	GLU	A	426	-94.297	10.411	65.610	1.00	53.42
3431	C	GLU	A	426	-94.406	6.425	67.767	1.00	42.60
3432	O	GLU	A	426	-93.236	6.290	67.432	1.00	42.84
3433	N	ARG	A	427	-94.776	6.806	68.981	1.00	41.37
3434	CA	ARG	A	427	-93.828	7.233	69.983	1.00	40.61
3435	CB	ARG	A	427	-94.457	8.364	70.802	1.00	40.83
3436	CG	ARG	A	427	-94.040	8.397	72.257	1.00	40.73
3437	CD	ARG	A	427	-93.165	9.568	72.653	1.00	41.61
3438	NE	ARG	A	427	-93.956	10.762	72.930	1.00	42.68
3439	CZ	ARG	A	427	-93.810	11.543	73.997	1.00	41.39
3440	NH1	ARG	A	427	-94.599	12.605	74.148	1.00	39.72
3441	NH2	ARG	A	427	-92.885	11.276	74.907	1.00	40.19
3442	C	ARG	A	427	-93.404	6.120	70.925	1.00	39.89
3443	O	ARG	A	427	-92.274	6.089	71.397	1.00	39.68
3444	N	CYS	A	428	-94.319	5.199	71.185	1.00	39.15
3445	CA	CYS	A	428	-94.094	4.180	72.189	1.00	38.16
3446	CB	CYS	A	428	-95.041	4.454	73.350	1.00	38.11
3447	SG	CYS	A	428	-94.567	5.971	74.198	1.00	39.02
3448	C	CYS	A	428	-94.228	2.757	71.677	1.00	37.54
3449	O	CYS	A	428	-95.310	2.326	71.275	1.00	37.47
3450	N	GLN	A	429	-93.112	2.026	71.701	1.00	36.94
3451	CA	GLN	A	429	-93.058	0.639	71.217	1.00	35.60
3452	CB	GLN	A	429	-92.486	0.589	69.796	1.00	35.44
3453	CG	GLN	A	429	-93.417	1.184	68.724	1.00	35.62
3454	CD	GLN	A	429	-92.719	1.477	67.396	1.00	38.22
3455	OE1	GLN	A	429	-93.227	2.261	66.592	1.00	40.96
3456	NE2	GLN	A	429	-91.551	0.881	67.176	1.00	38.12
3457	C	GLN	A	429	-92.209	-0.207	72.154	1.00	35.00
3458	O	GLN	A	429	-91.854	-1.355	71.853	1.00	34.86



FIGURE 3 BP

A	B	C	D	E	F	G	H	I	J
3459	N	TYR	A	430	-91.878	0.358	73.305	1.00	33.75
3460	CA	TYR	A	430	-91.023	-0.352	74.234	1.00	32.81
3461	CB	TYR	A	430	-89.564	0.064	74.034	1.00	32.27
3462	CG	TYR	A	430	-88.572	-0.952	74.548	1.00	32.27
3463	CD1	TYR	A	430	-88.372	-1.136	75.912	1.00	31.41
3464	CE1	TYR	A	430	-87.458	-2.055	76.375	1.00	30.09
3465	CZ	TYR	A	430	-86.754	-2.823	75.479	1.00	29.57
3466	OH	TYR	A	430	-85.842	-3.748	75.924	1.00	30.27
3467	CE2	TYR	A	430	-86.937	-2.669	74.135	1.00	30.11
3468	CD2	TYR	A	430	-87.845	-1.743	73.670	1.00	31.00
3469	C	TYR	A	430	-91.460	-0.001	75.616	1.00	32.40
3470	O	TYR	A	430	-91.103	1.050	76.118	1.00	32.17
3471	N	TYR	A	431	-92.212	-0.893	76.252	1.00	32.42
3472	CA	TYR	A	431	-92.767	-0.577	77.562	1.00	32.06
3473	CB	TYR	A	431	-94.292	-0.733	77.539	1.00	32.42
3474	CG	TYR	A	431	-95.081	0.337	76.833	1.00	31.65
3475	CD1	TYR	A	431	-95.581	1.422	77.540	1.00	32.43
3476	CE1	TYR	A	431	-96.316	2.407	76.939	1.00	30.12
3477	CZ	TYR	A	431	-96.589	2.329	75.614	1.00	32.47
3478	OH	TYR	A	431	-97.356	3.326	75.062	1.00	33.60
3479	CE2	TYR	A	431	-96.127	1.250	74.856	1.00	33.82
3480	CD2	TYR	A	431	-95.369	0.250	75.484	1.00	32.58
3481	C	TYR	A	431	-92.287	-1.480	78.661	1.00	31.67
3482	O	TYR	A	431	-91.939	-2.624	78.430	1.00	31.60
3483	N	SER	A	432	-92.306	-0.945	79.874	1.00	31.91
3484	CA	SER	A	432	-92.099	-1.718	81.078	1.00	31.56
3485	CB	SER	A	432	-90.753	-1.434	81.740	1.00	31.38
3486	OG	SER	A	432	-90.655	-0.102	82.176	1.00	31.53
3487	C	SER	A	432	-93.243	-1.288	81.969	1.00	31.64
3488	O	SER	A	432	-93.897	-0.290	81.701	1.00	31.32
3489	N	VAL	A	433	-93.468	-2.028	83.044	1.00	32.12
3490	CA	VAL	A	433	-94.595	-1.748	83.903	1.00	32.27
3491	CB	VAL	A	433	-95.828	-2.618	83.507	1.00	32.40
3492	CG1	VAL	A	433	-95.619	-4.070	83.904	1.00	31.04
3493	CG2	VAL	A	433	-97.112	-2.068	84.124	1.00	32.36
3494	C	VAL	A	433	-94.274	-1.963	85.369	1.00	32.44
3495	O	VAL	A	433	-93.372	-2.701	85.730	1.00	31.61
3496	N	SER	A	434	-95.023	-1.262	86.204	1.00	33.86
3497	CA	SER	A	434	-94.922	-1.386	87.639	1.00	34.71
3498	CB	SER	A	434	-94.116	-0.239	88.219	1.00	34.65
3499	OG	SER	A	434	-93.846	-0.483	89.584	1.00	36.01
3500	C	SER	A	434	-96.338	-1.348	88.172	1.00	35.48
3501	O	SER	A	434	-97.036	-0.342	88.049	1.00	35.33
3502	N	PHE	A	435	-96.769	-2.459	88.744	1.00	36.86
3503	CA	PHE	A	435	-98.107	-2.563	89.302	1.00	38.49
3504	CB	PHE	A	435	-98.622	-3.995	89.168	1.00	38.26
3505	CG	PHE	A	435	-99.027	-4.364	87.763	1.00	38.43
3506	CD1	PHE	A	435	-98.122	-4.949	86.896	1.00	37.43
3507	CE1	PHE	A	435	-98.504	-5.282	85.594	1.00	37.26
3508	CZ	PHE	A	435	-99.785	-5.029	85.169	1.00	37.65
3509	CE2	PHE	A	435	-100.696	-4.457	86.027	1.00	37.28

FIGURE 3 BQ

A	B	C	D	E	F	G	H	I	J
3510	CD2	PHE	A	435	-100.321	-4.125	87.313	1.00	37.90
3511	C	PHE	A	435	-98.106	-2.173	90.765	1.00	40.00
3512	O	PHE	A	435	-97.077	-2.255	91.437	1.00	40.12
3513	N	SER	A	436	-99.263	-1.743	91.258	1.00	41.50
3514	CA	SER	A	436	-99.396	-1.420	92.668	1.00	42.84
3515	CB	SER	A	436	-100.668	-0.616	92.945	1.00	42.51
3516	OG	SER	A	436	-101.832	-1.396	92.751	1.00	42.16
3517	C	SER	A	436	-99.401	-2.738	93.418	1.00	44.01
3518	O	SER	A	436	-99.467	-3.797	92.803	1.00	44.38
3519	N	LYS	A	437	-99.349	-2.673	94.742	1.00	45.22
3520	CA	LYS	A	437	-99.231	-3.868	95.563	1.00	46.58
3521	CB	LYS	A	437	-99.519	-3.534	97.022	1.00	47.47
3522	CG	LYS	A	437	-98.703	-4.324	98.032	1.00	49.42
3523	CD	LYS	A	437	-97.423	-3.575	98.403	1.00	53.36
3524	CE	LYS	A	437	-96.292	-3.911	97.451	1.00	54.76
3525	NZ	LYS	A	437	-96.001	-5.369	97.525	1.00	55.80
3526	C	LYS	A	437	-100.119	-5.016	95.119	1.00	46.93
3527	O	LYS	A	437	-99.677	-6.169	95.071	1.00	46.90
3528	N	GLU	A	438	-101.372	-4.706	94.805	1.00	47.53
3529	CA	GLU	A	438	-102.327	-5.732	94.398	1.00	47.90
3530	CB	GLU	A	438	-103.535	-5.759	95.349	1.00	48.13
3531	CG	GLU	A	438	-103.670	-7.012	96.205	1.00	50.29
3532	CD	GLU	A	438	-103.291	-6.804	97.667	1.00	54.05
3533	OE1	GLU	A	438	-102.553	-5.838	97.971	1.00	54.69
3534	OE2	GLU	A	438	-103.741	-7.613	98.523	1.00	55.47
3535	C	GLU	A	438	-102.787	-5.599	92.938	1.00	47.84
3536	O	GLU	A	438	-103.721	-6.277	92.513	1.00	47.88
3537	N	ALA	A	439	-102.131	-4.728	92.179	1.00	47.50
3538	CA	ALA	A	439	-102.429	-4.550	90.755	1.00	47.07
3539	CB	ALA	A	439	-102.587	-5.892	90.059	1.00	46.85
3540	C	ALA	A	439	-103.625	-3.638	90.459	1.00	47.11
3541	O	ALA	A	439	-104.098	-3.563	89.317	1.00	46.76
3542	N	LYS	A	440	-104.113	-2.942	91.478	1.00	46.83
3543	CA	LYS	A	440	-105.192	-1.995	91.258	1.00	46.68
3544	CB	LYS	A	440	-105.515	-1.250	92.544	1.00	47.03
3545	CG	LYS	A	440	-106.782	-1.688	93.236	1.00	48.96
3546	CD	LYS	A	440	-107.510	-0.456	93.794	1.00	51.04
3547	CE	LYS	A	440	-108.953	-0.764	94.181	1.00	52.01
3548	NZ	LYS	A	440	-109.071	-1.200	95.609	1.00	52.86
3549	C	LYS	A	440	-104.740	-0.996	90.203	1.00	46.22
3550	O	LYS	A	440	-105.527	-0.519	89.390	1.00	46.19
3551	N	TYR	A	441	-103.456	-0.665	90.224	1.00	45.65
3552	CA	TYR	A	441	-102.930	0.273	89.247	1.00	44.75
3553	CB	TYR	A	441	-102.638	1.618	89.887	1.00	45.05
3554	CG	TYR	A	441	-103.757	2.132	90.719	1.00	46.12
3555	CD1	TYR	A	441	-103.946	1.675	92.008	1.00	47.00
3556	CE1	TYR	A	441	-104.978	2.143	92.768	1.00	49.02
3557	CZ	TYR	A	441	-105.840	3.081	92.239	1.00	48.21
3558	OH	TYR	A	441	-106.879	3.553	92.992	1.00	50.11
3559	CE2	TYR	A	441	-105.666	3.551	90.970	1.00	48.19
3560	CD2	TYR	A	441	-104.634	3.074	90.216	1.00	47.79

FIGURE 3 BR

A	B	C	D	E	F	G	H	I	J
3561	C	TYR	A	441	-101.647	-0.214	88.649	1.00	43.69
3562	O	TYR	A	441	-101.063	-1.199	89.091	1.00	43.95
3563	N	TYR	A	442	-101.201	0.510	87.641	1.00	42.36
3564	CA	TYR	A	442	-99.931	0.216	87.042	1.00	41.07
3565	CB	TYR	A	442	-100.000	-1.018	86.132	1.00	40.75
3566	CG	TYR	A	442	-100.855	-0.913	84.889	1.00	40.36
3567	CD1	TYR	A	442	-102.204	-1.254	84.910	1.00	41.27
3568	CE1	TYR	A	442	-102.980	-1.178	83.765	1.00	41.19
3569	CZ	TYR	A	442	-102.399	-0.780	82.579	1.00	41.57
3570	OH	TYR	A	442	-103.143	-0.689	81.413	1.00	43.14
3571	CE2	TYR	A	442	-101.067	-0.462	82.544	1.00	40.67
3572	CD2	TYR	A	442	-100.305	-0.540	83.687	1.00	39.41
3573	C	TYR	A	442	-99.388	1.449	86.348	1.00	40.30
3574	O	TYR	A	442	-100.133	2.210	85.738	1.00	40.22
3575	N	GLN	A	443	-98.094	1.680	86.538	1.00	39.41
3576	CA	GLN	A	443	-97.395	2.747	85.853	1.00	38.70
3577	CB	GLN	A	443	-96.279	3.327	86.727	1.00	38.39
3578	CG	GLN	A	443	-95.240	4.082	85.896	1.00	38.84
3579	CD	GLN	A	443	-94.091	4.622	86.703	1.00	40.32
3580	OE1	GLN	A	443	-93.503	3.910	87.518	1.00	41.05
3581	NE2	GLN	A	443	-93.766	5.891	86.485	1.00	41.05
3582	C	GLN	A	443	-96.764	2.131	84.610	1.00	38.01
3583	O	GLN	A	443	-96.125	1.095	84.700	1.00	37.78
3584	N	LEU	A	444	-96.940	2.771	83.467	1.00	37.74
3585	CA	LEU	A	444	-96.355	2.296	82.222	1.00	37.77
3586	CB	LEU	A	444	-97.366	2.380	81.085	1.00	37.13
3587	CG	LEU	A	444	-98.305	1.201	80.831	1.00	37.70
3588	CD1	LEU	A	444	-97.554	-0.119	80.598	1.00	36.82
3589	CD2	LEU	A	444	-99.127	1.538	79.619	1.00	37.81
3590	C	LEU	A	444	-95.149	3.134	81.840	1.00	37.67
3591	O	LEU	A	444	-95.249	4.354	81.787	1.00	37.66
3592	N	ARG	A	445	-94.021	2.481	81.569	1.00	37.52
3593	CA	ARG	A	445	-92.847	3.195	81.086	1.00	38.14
3594	CB	ARG	A	445	-91.595	2.893	81.910	1.00	38.71
3595	CG	ARG	A	445	-90.476	3.904	81.626	1.00	41.69
3596	CD	ARG	A	445	-89.035	3.355	81.580	1.00	46.39
3597	NE	ARG	A	445	-88.890	2.061	82.239	1.00	50.92
3598	CZ	ARG	A	445	-87.728	1.532	82.600	1.00	53.29
3599	NH1	ARG	A	445	-87.692	0.347	83.187	1.00	54.23
3600	NH2	ARG	A	445	-86.597	2.191	82.378	1.00	56.43
3601	C	ARG	A	445	-92.546	2.861	79.636	1.00	37.56
3602	O	ARG	A	445	-92.251	1.711	79.310	1.00	37.23
3603	N	CYS	A	446	-92.611	3.876	78.780	1.00	37.08
3604	CA	CYS	A	446	-92.279	3.741	77.367	1.00	37.15
3605	CB	CYS	A	446	-93.322	4.463	76.533	1.00	37.41
3606	SG	CYS	A	446	-92.785	5.337	75.036	1.00	40.87
3607	C	CYS	A	446	-90.898	4.336	77.132	1.00	36.37
3608	O	CYS	A	446	-90.661	5.485	77.486	1.00	36.82
3609	N	SER	A	447	-89.998	3.563	76.525	1.00	35.37
3610	CA	SER	A	447	-88.610	3.991	76.336	1.00	34.30
3611	CB	SER	A	447	-87.654	2.890	76.804	1.00	34.46

FIGURE 3 BS

A	B	C	D	E	F	G	H	I	J
3612	OG	SER	A	447	-87.701	2.732	78.204	1.00	34.85
3613	C	SER	A	447	-88.239	4.319	74.915	1.00	33.43
3614	O	SER	A	447	-87.094	4.618	74.643	1.00	33.57
3615	N	GLY	A	448	-89.182	4.234	73.992	1.00	32.46
3616	CA	GLY	A	448	-88.852	4.502	72.609	1.00	31.79
3617	C	GLY	A	448	-89.927	4.020	71.674	1.00	31.31
3618	O	GLY	A	448	-90.811	3.283	72.087	1.00	31.10
3619	N	PRO	A	449	-89.814	4.362	70.396	1.00	31.28
3620	CA	PRO	A	449	-88.640	5.032	69.849	1.00	31.20
3621	CB	PRO	A	449	-88.794	4.827	68.339	1.00	30.61
3622	CG	PRO	A	449	-90.184	4.583	68.108	1.00	31.03
3623	CD	PRO	A	449	-90.876	4.213	69.391	1.00	30.97
3624	C	PRO	A	449	-88.635	6.528	70.115	1.00	31.96
3625	O	PRO	A	449	-87.680	7.179	69.722	1.00	32.18
3626	N	GLY	A	450	-89.682	7.061	70.738	1.00	32.70
3627	CA	GLY	A	450	-89.753	8.483	71.013	1.00	32.98
3628	C	GLY	A	450	-89.202	8.746	72.390	1.00	33.64
3629	O	GLY	A	450	-88.690	7.825	73.035	1.00	34.15
3630	N	LEU	A	451	-89.290	9.995	72.836	1.00	33.79
3631	CA	LEU	A	451	-88.827	10.382	74.155	1.00	34.03
3632	CB	LEU	A	451	-89.036	11.877	74.370	1.00	34.31
3633	CG	LEU	A	451	-87.992	12.788	73.719	1.00	35.35
3634	CD1	LEU	A	451	-86.969	12.001	72.895	1.00	35.84
3635	CD2	LEU	A	451	-88.668	13.841	72.885	1.00	35.06
3636	C	LEU	A	451	-89.641	9.597	75.152	1.00	34.16
3637	O	LEU	A	451	-90.822	9.376	74.945	1.00	32.92
3638	N	PRO	A	452	-89.006	9.168	76.234	1.00	34.62
3639	CA	PRO	A	452	-89.692	8.365	77.239	1.00	35.26
3640	CB	PRO	A	452	-88.680	8.295	78.378	1.00	35.14
3641	CG	PRO	A	452	-87.367	8.452	77.700	1.00	35.39
3642	CD	PRO	A	452	-87.601	9.421	76.585	1.00	34.60
3643	C	PRO	A	452	-90.976	9.037	77.703	1.00	36.29
3644	O	PRO	A	452	-91.033	10.267	77.861	1.00	35.67
3645	N	LEU	A	453	-91.990	8.205	77.942	1.00	37.07
3646	CA	LEU	A	453	-93.302	8.660	78.367	1.00	37.52
3647	CB	LEU	A	453	-94.288	8.560	77.197	1.00	37.81
3648	CG	LEU	A	453	-95.788	8.610	77.501	1.00	39.87
3649	CD1	LEU	A	453	-96.222	7.270	78.100	1.00	42.12
3650	CD2	LEU	A	453	-96.606	8.902	76.249	1.00	40.21
3651	C	LEU	A	453	-93.766	7.839	79.557	1.00	37.68
3652	O	LEU	A	453	-93.807	6.603	79.495	1.00	38.37
3653	N	TYR	A	454	-94.105	8.512	80.650	1.00	37.49
3654	CA	TYR	A	454	-94.533	7.817	81.851	1.00	38.10
3655	CB	TYR	A	454	-93.640	8.189	83.048	1.00	38.22
3656	CG	TYR	A	454	-92.176	7.767	82.915	1.00	37.53
3657	CD1	TYR	A	454	-91.644	6.727	83.688	1.00	38.56
3658	CE1	TYR	A	454	-90.297	6.357	83.572	1.00	37.18
3659	CZ	TYR	A	454	-89.480	7.027	82.664	1.00	37.23
3660	OH	TYR	A	454	-88.158	6.677	82.510	1.00	35.84
3661	CE2	TYR	A	454	-89.987	8.050	81.896	1.00	37.06
3662	CD2	TYR	A	454	-91.324	8.415	82.027	1.00	37.67

FIGURE 3 BT

A	B	C	D	E	F	G	H	I	J
3663	C	TYR	A	454	-96.006	8.114	82.138	1.00	38.94
3664	O	TYR	A	454	-96.412	9.285	82.250	1.00	39.17
3665	N	THR	A	455	-96.809	7.053	82.236	1.00	39.20
3666	CA	THR	A	455	-98.254	7.185	82.439	1.00	39.22
3667	CB	THR	A	455	-99.019	6.835	81.162	1.00	39.25
3668	OG1	THR	A	455	-98.643	5.521	80.742	1.00	39.10
3669	CG2	THR	A	455	-98.623	7.722	80.004	1.00	38.59
3670	C	THR	A	455	-98.765	6.266	83.525	1.00	39.36
3671	O	THR	A	455	-98.164	5.233	83.805	1.00	39.52
3672	N	LEU	A	456	-99.898	6.633	84.117	1.00	39.82
3673	CA	LEU	A	456	-100.491	5.858	85.214	1.00	40.25
3674	CB	LEU	A	456	-100.579	6.720	86.469	1.00	39.82
3675	CG	LEU	A	456	-100.467	6.139	87.885	1.00	40.98
3676	CD1	LEU	A	456	-101.771	6.252	88.653	1.00	41.57
3677	CD2	LEU	A	456	-99.910	4.726	87.932	1.00	40.08
3678	C	LEU	A	456	-101.868	5.350	84.786	1.00	40.38
3679	O	LEU	A	456	-102.603	6.048	84.108	1.00	39.68
3680	N	HIS	A	457	-102.194	4.119	85.158	1.00	41.17
3681	CA	HIS	A	457	-103.444	3.502	84.730	1.00	41.91
3682	CB	HIS	A	457	-103.180	2.582	83.539	1.00	41.62
3683	CG	HIS	A	457	-102.392	3.219	82.446	1.00	40.45
3684	ND1	HIS	A	457	-102.923	3.478	81.203	1.00	40.12
3685	CE1	HIS	A	457	-102.000	4.042	80.444	1.00	40.89
3686	NE2	HIS	A	457	-100.887	4.148	81.149	1.00	39.27
3687	CD2	HIS	A	457	-101.105	3.634	82.401	1.00	39.96
3688	C	HIS	A	457	-104.079	2.657	85.822	1.00	42.78
3689	O	HIS	A	457	-103.378	2.136	86.677	1.00	43.02
3690	N	SER	A	458	-105.402	2.505	85.786	1.00	43.95
3691	CA	SER	A	458	-106.073	1.632	86.748	1.00	45.16
3692	CB	SER	A	458	-107.379	2.246	87.258	1.00	45.17
3693	OG	SER	A	458	-108.239	2.594	86.189	1.00	46.02
3694	C	SER	A	458	-106.323	0.289	86.073	1.00	46.01
3695	O	SER	A	458	-106.669	0.236	84.896	1.00	46.26
3696	N	SER	A	459	-106.152	-0.801	86.803	1.00	46.78
3697	CA	SER	A	459	-106.269	-2.091	86.161	1.00	48.21
3698	CB	SER	A	459	-105.459	-3.138	86.918	1.00	48.17
3699	OG	SER	A	459	-106.311	-3.969	87.687	1.00	50.02
3700	C	SER	A	459	-107.720	-2.557	85.981	1.00	48.79
3701	O	SER	A	459	-107.998	-3.424	85.163	1.00	48.63
3702	N	VAL	A	460	-108.645	-1.979	86.736	1.00	49.68
3703	CA	VAL	A	460	-110.037	-2.418	86.653	1.00	50.36
3704	CB	VAL	A	460	-110.947	-1.659	87.648	1.00	50.46
3705	CG1	VAL	A	460	-111.091	-0.184	87.247	1.00	50.00
3706	CG2	VAL	A	460	-112.299	-2.353	87.759	1.00	50.44
3707	C	VAL	A	460	-110.590	-2.367	85.222	1.00	50.55
3708	O	VAL	A	460	-111.196	-3.329	84.753	1.00	50.43
3709	N	ASN	A	461	-110.347	-1.263	84.525	1.00	51.08
3710	CA	ASN	A	461	-110.790	-1.098	83.141	1.00	51.75
3711	CB	ASN	A	461	-111.875	-0.044	83.087	1.00	52.15
3712	CG	ASN	A	461	-111.562	1.131	83.977	1.00	52.89
3713	OD1	ASN	A	461	-110.392	1.480	84.174	1.00	54.11

FIGURE 3 BU

A	B	C	D	E	F	G	H	I	J
3714	ND2	ASN	A	461	-112.601	1.738	84.544	1.00	53.79
3715	C	ASN	A	461	-109.650	-0.651	82.237	1.00	51.86
3716	O	ASN	A	461	-109.876	-0.108	81.145	1.00	52.00
3717	N	ASP	A	462	-108.424	-0.873	82.703	1.00	51.87
3718	CA	ASP	A	462	-107.239	-0.449	81.967	1.00	51.68
3719	CB	ASP	A	462	-106.868	-1.472	80.893	1.00	51.24
3720	CG	ASP	A	462	-106.742	-2.872	81.454	1.00	50.98
3721	OD1	ASP	A	462	-107.424	-3.789	80.942	1.00	49.36
3722	OD2	ASP	A	462	-105.997	-3.149	82.421	1.00	50.64
3723	C	ASP	A	462	-107.451	0.923	81.349	1.00	51.78
3724	O	ASP	A	462	-107.266	1.101	80.150	1.00	52.32
3725	N	LYS	A	463	-107.868	1.885	82.165	1.00	51.73
3726	CA	LYS	A	463	-108.046	3.251	81.686	1.00	51.61
3727	CB	LYS	A	463	-109.361	3.859	82.195	1.00	52.12
3728	CG	LYS	A	463	-109.216	4.843	83.354	1.00	53.80
3729	CD	LYS	A	463	-110.100	6.079	83.170	1.00	56.48
3730	CE	LYS	A	463	-109.461	7.311	83.813	1.00	57.93
3731	NZ	LYS	A	463	-110.082	8.604	83.381	1.00	58.60
3732	C	LYS	A	463	-106.854	4.066	82.151	1.00	51.09
3733	O	LYS	A	463	-106.292	3.796	83.217	1.00	50.60
3734	N	GLY	A	464	-106.458	5.043	81.342	1.00	50.66
3735	CA	GLY	A	464	-105.315	5.873	81.663	1.00	50.48
3736	C	GLY	A	464	-105.686	7.064	82.518	1.00	50.28
3737	O	GLY	A	464	-106.246	8.038	82.023	1.00	50.43
3738	N	LEU	A	465	-105.370	6.978	83.803	1.00	49.88
3739	CA	LEU	A	465	-105.637	8.055	84.743	1.00	49.61
3740	CB	LEU	A	465	-105.217	7.662	86.155	1.00	49.71
3741	CG	LEU	A	465	-105.779	6.366	86.731	1.00	50.27
3742	CD1	LEU	A	465	-105.786	6.448	88.253	1.00	51.84
3743	CD2	LEU	A	465	-107.180	6.079	86.222	1.00	51.27
3744	C	LEU	A	465	-104.947	9.355	84.351	1.00	49.30
3745	O	LEU	A	465	-105.589	10.412	84.341	1.00	49.57
3746	N	ARG	A	466	-103.655	9.296	84.025	1.00	48.60
3747	CA	ARG	A	466	-102.930	10.524	83.667	1.00	47.99
3748	CB	ARG	A	466	-102.975	11.514	84.835	1.00	48.10
3749	CG	ARG	A	466	-102.409	10.949	86.130	1.00	47.72
3750	CD	ARG	A	466	-102.653	11.822	87.346	1.00	47.83
3751	NE	ARG	A	466	-102.546	11.040	88.565	1.00	47.93
3752	CZ	ARG	A	466	-103.555	10.397	89.137	1.00	47.98
3753	NH1	ARG	A	466	-103.345	9.694	90.240	1.00	48.67
3754	NH2	ARG	A	466	-104.774	10.460	88.618	1.00	47.58
3755	C	ARG	A	466	-101.469	10.364	83.251	1.00	47.62
3756	O	ARG	A	466	-100.840	9.318	83.454	1.00	47.46
3757	N	VAL	A	467	-100.934	11.442	82.689	1.00	46.84
3758	CA	VAL	A	467	-99.541	11.488	82.278	1.00	46.21
3759	CB	VAL	A	467	-99.356	12.388	81.050	1.00	46.28
3760	CG1	VAL	A	467	-97.932	12.294	80.519	1.00	46.55
3761	CG2	VAL	A	467	-100.350	11.991	79.957	1.00	46.39
3762	C	VAL	A	467	-98.669	11.969	83.440	1.00	45.53
3763	O	VAL	A	467	-98.882	13.054	83.985	1.00	45.50
3764	N	LEU	A	468	-97.699	11.140	83.825	1.00	44.68

FIGURE 3 BV

A	B	C	D	E	F	G	H	I	J
3765	CA	LEU	A	468	-96.816	11.442	84.947	1.00	43.73
3766	CB	LEU	A	468	-96.367	10.158	85.624	1.00	43.64
3767	CG	LEU	A	468	-97.503	9.347	86.240	1.00	43.86
3768	CD1	LEU	A	468	-97.013	7.951	86.605	1.00	42.81
3769	CD2	LEU	A	468	-98.064	10.066	87.460	1.00	43.88
3770	C	LEU	A	468	-95.607	12.258	84.520	1.00	43.12
3771	O	LEU	A	468	-95.192	13.178	85.213	1.00	42.91
3772	N	GLU	A	469	-95.043	11.918	83.371	1.00	42.82
3773	CA	GLU	A	469	-93.899	12.649	82.844	1.00	42.57
3774	CB	GLU	A	469	-92.594	12.183	83.504	1.00	42.47
3775	CG	GLU	A	469	-91.348	12.813	82.900	1.00	41.72
3776	CD	GLU	A	469	-91.356	14.324	82.998	1.00	42.26
3777	OE1	GLU	A	469	-91.186	14.994	81.955	1.00	43.08
3778	OE2	GLU	A	469	-91.525	14.845	84.124	1.00	43.00
3779	C	GLU	A	469	-93.860	12.397	81.360	1.00	42.39
3780	O	GLU	A	469	-93.973	11.263	80.929	1.00	42.87
3781	N	ASP	A	470	-93.695	13.449	80.572	1.00	42.38
3782	CA	ASP	A	470	-93.706	13.302	79.121	1.00	42.12
3783	CB	ASP	A	470	-94.939	13.993	78.533	1.00	42.50
3784	CG	ASP	A	470	-94.937	15.502	78.767	1.00	43.52
3785	OD1	ASP	A	470	-95.916	16.155	78.347	1.00	46.03
3786	OD2	ASP	A	470	-94.015	16.126	79.349	1.00	44.41
3787	C	ASP	A	470	-92.479	13.881	78.454	1.00	41.72
3788	O	ASP	A	470	-92.426	13.935	77.225	1.00	41.65
3789	N	ASN	A	471	-91.512	14.334	79.250	1.00	41.45
3790	CA	ASN	A	471	-90.291	14.954	78.717	1.00	41.38
3791	CB	ASN	A	471	-89.345	13.921	78.111	1.00	41.20
3792	CG	ASN	A	471	-88.528	13.213	79.158	1.00	41.48
3793	OD1	ASN	A	471	-87.686	13.822	79.813	1.00	42.74
3794	ND2	ASN	A	471	-88.792	11.927	79.350	1.00	41.64
3795	C	ASN	A	471	-90.511	16.069	77.712	1.00	41.65
3796	O	ASN	A	471	-89.706	16.254	76.792	1.00	42.56
3797	N	SER	A	472	-91.589	16.821	77.876	1.00	41.59
3798	CA	SER	A	472	-91.828	17.960	76.999	1.00	41.81
3799	CB	SER	A	472	-93.152	18.654	77.354	1.00	41.60
3800	OG	SER	A	472	-93.323	18.714	78.757	1.00	42.06
3801	C	SER	A	472	-90.657	18.937	77.076	1.00	41.50
3802	O	SER	A	472	-90.261	19.523	76.070	1.00	41.97
3803	N	ALA	A	473	-90.101	19.111	78.268	1.00	41.56
3804	CA	ALA	A	473	-88.939	19.980	78.430	1.00	41.91
3805	CB	ALA	A	473	-88.488	20.016	79.885	1.00	41.64
3806	C	ALA	A	473	-87.798	19.525	77.517	1.00	42.31
3807	O	ALA	A	473	-87.299	20.313	76.702	1.00	42.61
3808	N	LEU	A	474	-87.403	18.254	77.630	1.00	42.24
3809	CA	LEU	A	474	-86.336	17.732	76.787	1.00	42.83
3810	CB	LEU	A	474	-86.084	16.245	77.045	1.00	42.90
3811	CG	LEU	A	474	-85.137	15.657	75.995	1.00	42.23
3812	CD1	LEU	A	474	-83.713	16.182	76.236	1.00	42.80
3813	CD2	LEU	A	474	-85.161	14.135	75.983	1.00	42.52
3814	C	LEU	A	474	-86.709	17.899	75.336	1.00	43.59
3815	O	LEU	A	474	-85.866	18.204	74.498	1.00	43.31

FIGURE 3 BW

A	B	C	D	E	F	G	H	I	J
3816	N	ASP	A	475	-87.985	17.664	75.044	1.00	44.41
3817	CA	ASP	A	475	-88.480	17.801	73.688	1.00	45.98
3818	CB	ASP	A	475	-89.952	17.387	73.602	1.00	46.18
3819	CG	ASP	A	475	-90.543	17.652	72.244	1.00	48.02
3820	OD1	ASP	A	475	-91.473	18.487	72.152	1.00	51.22
3821	OD2	ASP	A	475	-90.137	17.091	71.206	1.00	50.30
3822	C	ASP	A	475	-88.280	19.218	73.159	1.00	46.17
3823	O	ASP	A	475	-87.850	19.406	72.033	1.00	45.89
3824	N	LYS	A	476	-88.574	20.215	73.980	1.00	47.41
3825	CA	LYS	A	476	-88.398	21.599	73.546	1.00	48.69
3826	CB	LYS	A	476	-88.885	22.580	74.618	1.00	48.90
3827	CG	LYS	A	476	-88.932	24.039	74.148	1.00	51.61
3828	CD	LYS	A	476	-88.942	25.030	75.327	1.00	55.33
3829	CE	LYS	A	476	-90.345	25.232	75.925	1.00	56.83
3830	NZ	LYS	A	476	-91.207	26.170	75.136	1.00	56.78
3831	C	LYS	A	476	-86.937	21.881	73.186	1.00	48.82
3832	O	LYS	A	476	-86.645	22.414	72.117	1.00	49.02
3833	N	MET	A	477	-86.017	21.495	74.061	1.00	49.18
3834	CA	MET	A	477	-84.605	21.775	73.815	1.00	49.80
3835	CB	MET	A	477	-83.759	21.599	75.091	1.00	50.15
3836	CG	MET	A	477	-84.365	20.657	76.117	1.00	52.66
3837	SD	MET	A	477	-83.930	20.972	77.868	1.00	57.93
3838	CE	MET	A	477	-82.154	21.420	77.749	1.00	56.32
3839	C	MET	A	477	-84.024	21.028	72.613	1.00	49.47
3840	O	MET	A	477	-83.227	21.592	71.867	1.00	49.69
3841	N	LEU	A	478	-84.443	19.785	72.398	1.00	49.22
3842	CA	LEU	A	478	-83.955	19.004	71.255	1.00	48.91
3843	CB	LEU	A	478	-84.448	17.553	71.331	1.00	48.51
3844	CG	LEU	A	478	-83.491	16.488	71.884	1.00	46.60
3845	CD1	LEU	A	478	-84.282	15.365	72.515	1.00	44.18
3846	CD2	LEU	A	478	-82.525	17.071	72.895	1.00	44.56
3847	C	LEU	A	478	-84.288	19.589	69.880	1.00	49.49
3848	O	LEU	A	478	-83.632	19.263	68.895	1.00	49.35
3849	N	GLN	A	479	-85.313	20.431	69.801	1.00	50.36
3850	CA	GLN	A	479	-85.698	21.039	68.519	1.00	51.25
3851	CB	GLN	A	479	-86.907	21.951	68.702	1.00	51.64
3852	CG	GLN	A	479	-88.131	21.283	69.315	1.00	53.72
3853	CD	GLN	A	479	-89.118	22.298	69.853	1.00	55.89
3854	OE1	GLN	A	479	-90.320	22.222	69.574	1.00	56.61
3855	NE2	GLN	A	479	-88.613	23.261	70.619	1.00	57.98
3856	C	GLN	A	479	-84.554	21.872	67.949	1.00	51.31
3857	O	GLN	A	479	-84.451	22.073	66.736	1.00	51.16
3858	N	ASN	A	480	-83.704	22.350	68.850	1.00	51.49
3859	CA	ASN	A	480	-82.563	23.184	68.505	1.00	51.84
3860	CB	ASN	A	480	-81.979	23.788	69.773	1.00	52.62
3861	CG	ASN	A	480	-82.306	25.242	69.917	1.00	54.63
3862	OD1	ASN	A	480	-81.950	25.872	70.917	1.00	58.05
3863	ND2	ASN	A	480	-82.980	25.798	68.915	1.00	55.77
3864	C	ASN	A	480	-81.440	22.454	67.805	1.00	51.02
3865	O	ASN	A	480	-80.840	22.959	66.857	1.00	51.24
3866	N	VAL	A	481	-81.162	21.254	68.276	1.00	49.80



FIGURE 3 BX

A	B	C	D	E	F	G	H	I	J
3867	CA	VAL	A	481	-80.018	20.516	67.792	1.00	48.47
3868	CB	VAL	A	481	-79.408	19.716	68.945	1.00	48.63
3869	CG1	VAL	A	481	-80.492	19.324	69.932	1.00	48.32
3870	CG2	VAL	A	481	-78.657	18.513	68.428	1.00	48.71
3871	C	VAL	A	481	-80.327	19.612	66.612	1.00	47.73
3872	O	VAL	A	481	-81.407	19.019	66.533	1.00	47.70
3873	N	GLN	A	482	-79.385	19.549	65.674	1.00	46.58
3874	CA	GLN	A	482	-79.503	18.657	64.527	1.00	45.60
3875	CB	GLN	A	482	-78.431	18.950	63.478	1.00	45.89
3876	CG	GLN	A	482	-78.803	20.048	62.491	1.00	46.68
3877	CD	GLN	A	482	-77.632	20.450	61.610	1.00	49.12
3878	OE1	GLN	A	482	-77.532	20.021	60.449	1.00	49.65
3879	NE2	GLN	A	482	-76.731	21.264	62.162	1.00	48.59
3880	C	GLN	A	482	-79.347	17.244	65.050	1.00	44.65
3881	O	GLN	A	482	-78.237	16.712	65.161	1.00	44.89
3882	N	MET	A	483	-80.464	16.620	65.381	1.00	43.19
3883	CA	MET	A	483	-80.356	15.304	65.983	1.00	42.31
3884	CB	MET	A	483	-81.138	15.223	67.283	1.00	42.74
3885	CG	MET	A	483	-80.330	15.935	68.344	1.00	43.53
3886	SD	MET	A	483	-80.291	15.168	69.912	1.00	43.97
3887	CE	MET	A	483	-80.958	13.601	69.556	1.00	43.89
3888	C	MET	A	483	-80.512	14.075	65.106	1.00	41.10
3889	O	MET	A	483	-81.270	14.061	64.136	1.00	41.20
3890	N	PRO	A	484	-79.762	13.046	65.477	1.00	39.61
3891	CA	PRO	A	484	-79.678	11.822	64.695	1.00	38.67
3892	CB	PRO	A	484	-78.724	10.954	65.528	1.00	38.29
3893	CG	PRO	A	484	-78.928	11.443	66.883	1.00	37.49
3894	CD	PRO	A	484	-78.952	12.943	66.700	1.00	39.37
3895	C	PRO	A	484	-80.998	11.092	64.600	1.00	38.20
3896	O	PRO	A	484	-81.895	11.222	65.441	1.00	38.10
3897	N	SER	A	485	-81.057	10.237	63.587	1.00	37.51
3898	CA	SER	A	485	-82.207	9.378	63.330	1.00	37.29
3899	CB	SER	A	485	-82.556	9.425	61.842	1.00	37.14
3900	CG	SER	A	485	-83.826	8.897	61.654	1.00	36.93
3901	C	SER	A	485	-82.028	7.904	63.801	1.00	37.17
3902	O	SER	A	485	-80.932	7.476	64.181	1.00	37.88
3903	N	LYS	A	486	-83.109	7.128	63.766	1.00	36.73
3904	CA	LYS	A	486	-83.062	5.746	64.240	1.00	35.49
3905	CB	LYS	A	486	-83.647	5.664	65.654	1.00	35.57
3906	CG	LYS	A	486	-82.929	4.686	66.621	1.00	36.30
3907	CD	LYS	A	486	-83.481	3.262	66.571	1.00	33.64
3908	CE	LYS	A	486	-82.682	2.328	67.460	1.00	31.92
3909	NZ	LYS	A	486	-82.930	2.396	68.930	1.00	30.35
3910	C	LYS	A	486	-83.822	4.812	63.315	1.00	34.74
3911	O	LYS	A	486	-85.052	4.806	63.288	1.00	33.95
3912	N	LYS	A	487	-83.084	4.014	62.554	1.00	34.07
3913	CA	LYS	A	487	-83.705	3.036	61.684	1.00	33.42
3914	CB	LYS	A	487	-83.121	3.101	60.286	1.00	33.59
3915	CG	LYS	A	487	-83.425	1.862	59.468	1.00	36.69
3916	CD	LYS	A	487	-83.800	2.226	58.045	1.00	41.28
3917	CE	LYS	A	487	-83.653	1.024	57.111	1.00	43.84

FIGURE 3 BY

A	B	C	D	E	F	G	H	I	J
3918	NZ	LYS	A	487	-84.134	1.338	55.736	1.00	43.68
3919	C	LYS	A	487	-83.559	1.619	62.233	1.00	33.03
3920	O	LYS	A	487	-82.439	1.136	62.414	1.00	32.66
3921	N	LEU	A	488	-84.705	0.972	62.468	1.00	31.94
3922	CA	LEU	A	488	-84.793	-0.386	62.982	1.00	31.33
3923	CB	LEU	A	488	-85.744	-0.441	64.170	1.00	30.72
3924	CG	LEU	A	488	-85.506	-1.396	65.334	1.00	33.13
3925	CD1	LEU	A	488	-86.848	-1.982	65.790	1.00	32.47
3926	CD2	LEU	A	488	-84.510	-2.493	65.002	1.00	31.20
3927	C	LEU	A	488	-85.387	-1.281	61.905	1.00	30.55
3928	O	LEU	A	488	-86.536	-1.077	61.486	1.00	30.55
3929	N	ASP	A	489	-84.646	-2.308	61.503	1.00	29.06
3930	CA	ASP	A	489	-85.097	-3.154	60.413	1.00	29.01
3931	CB	ASP	A	489	-84.799	-2.467	59.076	1.00	29.47
3932	CG	ASP	A	489	-85.758	-2.870	57.976	1.00	30.99
3933	OD1	ASP	A	489	-85.810	-2.167	56.953	1.00	34.83
3934	OD2	ASP	A	489	-86.511	-3.858	58.036	1.00	33.27
3935	C	ASP	A	489	-84.422	-4.523	60.479	1.00	28.53
3936	O	ASP	A	489	-83.693	-4.825	61.442	1.00	27.88
3937	N	PHE	A	490	-84.686	-5.359	59.477	1.00	27.83
3938	CA	PHE	A	490	-84.065	-6.681	59.427	1.00	27.72
3939	CB	PHE	A	490	-85.083	-7.764	59.808	1.00	27.43
3940	CG	PHE	A	490	-86.211	-7.913	58.825	1.00	25.57
3941	CD1	PHE	A	490	-86.096	-8.760	57.739	1.00	24.09
3942	CE1	PHE	A	490	-87.138	-8.886	56.816	1.00	22.61
3943	CZ	PHE	A	490	-88.284	-8.191	56.981	1.00	20.58
3944	CE2	PHE	A	490	-88.416	-7.338	58.057	1.00	24.85
3945	CD2	PHE	A	490	-87.384	-7.207	58.984	1.00	24.52
3946	C	PHE	A	490	-83.498	-6.997	58.062	1.00	28.25
3947	O	PHE	A	490	-83.920	-6.426	57.066	1.00	28.31
3948	N	ILE	A	491	-82.527	-7.898	58.021	1.00	29.32
3949	CA	ILE	A	491	-82.030	-8.438	56.761	1.00	30.10
3950	CB	ILE	A	491	-80.513	-8.178	56.552	1.00	30.32
3951	CG1	ILE	A	491	-79.689	-8.904	57.621	1.00	30.59
3952	CD1	ILE	A	491	-78.214	-8.869	57.347	1.00	31.85
3953	CG2	ILE	A	491	-80.177	-6.669	56.546	1.00	27.87
3954	C	ILE	A	491	-82.302	-9.943	56.825	1.00	31.72
3955	O	ILE	A	491	-82.593	-10.502	57.890	1.00	31.10
3956	N	ILE	A	492	-82.223	-10.608	55.684	1.00	33.72
3957	CA	ILE	A	492	-82.437	-12.039	55.670	1.00	35.18
3958	CB	ILE	A	492	-83.369	-12.471	54.533	1.00	35.31
3959	CG1	ILE	A	492	-84.794	-11.984	54.782	1.00	35.48
3960	CD1	ILE	A	492	-85.413	-12.485	56.062	1.00	33.16
3961	CG2	ILE	A	492	-83.373	-13.990	54.431	1.00	36.28
3962	C	ILE	A	492	-81.108	-12.727	55.492	1.00	36.09
3963	O	ILE	A	492	-80.309	-12.335	54.660	1.00	36.32
3964	N	LEU	A	493	-80.869	-13.738	56.318	1.00	37.37
3965	CA	LEU	A	493	-79.707	-14.595	56.191	1.00	38.16
3966	CB	LEU	A	493	-78.732	-14.367	57.335	1.00	37.88
3967	CG	LEU	A	493	-77.484	-13.521	57.096	1.00	39.32
3968	CD1	LEU	A	493	-77.410	-12.362	58.057	1.00	38.41

FIGURE 3 BZ

A	B	C	D	E	F	G	H	I	J
3969	CD2	LEU	A	493	-77.341	-13.071	55.626	1.00	39.89
3970	C	LEU	A	493	-80.233	-16.002	56.305	1.00	38.84
3971	O	LEU	A	493	-80.833	-16.352	57.331	1.00	38.82
3972	N	ASN	A	494	-80.031	-16.812	55.271	1.00	39.50
3973	CA	ASN	A	494	-80.453	-18.206	55.338	1.00	40.92
3974	CB	ASN	A	494	-79.600	-18.967	56.361	1.00	41.46
3975	CG	ASN	A	494	-78.358	-19.602	55.741	1.00	45.04
3976	OD1	ASN	A	494	-77.243	-19.575	56.319	1.00	46.86
3977	ND2	ASN	A	494	-78.544	-20.210	54.567	1.00	47.43
3978	C	ASN	A	494	-81.945	-18.371	55.666	1.00	40.69
3979	O	ASN	A	494	-82.331	-19.235	56.461	1.00	41.21
3980	N	GLU	A	495	-82.775	-17.524	55.069	1.00	40.67
3981	CA	GLU	A	495	-84.229	-17.588	55.257	1.00	40.66
3982	CB	GLU	A	495	-84.765	-18.967	54.842	1.00	41.09
3983	CG	GLU	A	495	-84.249	-19.376	53.471	1.00	43.98
3984	CD	GLU	A	495	-84.930	-20.598	52.893	1.00	48.37
3985	OE1	GLU	A	495	-84.445	-21.079	51.840	1.00	51.01
3986	OE2	GLU	A	495	-85.937	-21.071	53.471	1.00	48.69
3987	C	GLU	A	495	-84.658	-17.227	56.678	1.00	39.77
3988	O	GLU	A	495	-85.761	-17.561	57.119	1.00	40.01
3989	N	THR	A	496	-83.776	-16.535	57.393	1.00	38.18
3990	CA	THR	A	496	-84.084	-16.095	58.738	1.00	36.33
3991	CB	THR	A	496	-83.142	-16.770	59.731	1.00	36.57
3992	OG1	THR	A	496	-83.225	-18.189	59.564	1.00	38.87
3993	CG2	THR	A	496	-83.619	-16.538	61.165	1.00	36.12
3994	C	THR	A	496	-83.939	-14.588	58.848	1.00	34.71
3995	O	THR	A	496	-83.125	-13.969	58.162	1.00	34.61
3996	N	LYS	A	497	-84.731	-14.003	59.723	1.00	32.91
3997	CA	LYS	A	497	-84.633	-12.587	59.997	1.00	31.43
3998	CB	LYS	A	497	-85.966	-12.072	60.503	1.00	31.44
3999	CG	LYS	A	497	-86.894	-11.560	59.455	1.00	33.48
4000	CD	LYS	A	497	-88.294	-11.975	59.816	1.00	37.59
4001	CE	LYS	A	497	-89.300	-10.902	59.526	1.00	39.41
4002	NZ	LYS	A	497	-90.642	-11.494	59.819	1.00	42.04
4003	C	LYS	A	497	-83.617	-12.393	61.106	1.00	29.99
4004	O	LYS	A	497	-83.576	-13.158	62.060	1.00	28.96
4005	N	PHE	A	498	-82.775	-11.384	60.942	1.00	28.58
4006	CA	PHE	A	498	-81.866	-10.940	61.989	1.00	27.19
4007	CB	PHE	A	498	-80.440	-11.404	61.688	1.00	26.62
4008	CG	PHE	A	498	-80.286	-12.894	61.723	1.00	26.36
4009	CD1	PHE	A	498	-80.208	-13.578	62.936	1.00	24.73
4010	CE1	PHE	A	498	-80.079	-14.973	62.967	1.00	23.81
4011	CZ	PHE	A	498	-80.046	-15.676	61.789	1.00	25.41
4012	CE2	PHE	A	498	-80.133	-14.992	60.572	1.00	25.98
4013	CD2	PHE	A	498	-80.268	-13.621	60.550	1.00	25.49
4014	C	PHE	A	498	-82.017	-9.418	62.009	1.00	26.34
4015	O	PHE	A	498	-81.909	-8.775	60.974	1.00	26.29
4016	N	TRP	A	499	-82.291	-8.842	63.170	1.00	26.02
4017	CA	TRP	A	499	-82.577	-7.424	63.230	1.00	24.99
4018	CB	TRP	A	499	-83.673	-7.166	64.260	1.00	24.90
4019	CG	TRP	A	499	-84.981	-7.748	63.838	1.00	25.23

FIGURE 3 CA

A	B	C	D	E	F	G	H	I	J
4020	CD1	TRP	A	499	-85.310	-9.065	63.808	1.00	26.41
4021	NE1	TRP	A	499	-86.596	-9.225	63.350	1.00	27.66
4022	CE2	TRP	A	499	-87.121	-7.991	63.071	1.00	26.05
4023	CD2	TRP	A	499	-86.130	-7.038	63.361	1.00	25.37
4024	CE3	TRP	A	499	-86.427	-5.679	63.156	1.00	27.08
4025	CZ3	TRP	A	499	-87.688	-5.330	62.669	1.00	26.31
4026	CH2	TRP	A	499	-88.643	-6.314	62.400	1.00	26.65
4027	CZ2	TRP	A	499	-88.376	-7.646	62.592	1.00	24.51
4028	C	TRP	A	499	-81.345	-6.567	63.474	1.00	25.20
4029	O	TRP	A	499	-80.363	-7.016	64.064	1.00	24.93
4030	N	TYR	A	500	-81.405	-5.332	62.988	1.00	25.23
4031	CA	TYR	A	500	-80.306	-4.401	63.128	1.00	25.42
4032	CB	TYR	A	500	-79.424	-4.413	61.876	1.00	25.54
4033	CG	TYR	A	500	-80.043	-3.753	60.649	1.00	26.64
4034	CD1	TYR	A	500	-79.967	-2.374	60.467	1.00	26.40
4035	CE1	TYR	A	500	-80.512	-1.757	59.350	1.00	26.86
4036	CZ	TYR	A	500	-81.144	-2.519	58.375	1.00	29.46
4037	OH	TYR	A	500	-81.675	-1.882	57.271	1.00	31.13
4038	CE2	TYR	A	500	-81.236	-3.903	58.509	1.00	27.58
4039	CD2	TYR	A	500	-80.682	-4.516	59.653	1.00	27.78
4040	C	TYR	A	500	-80.888	-3.015	63.316	1.00	25.49
4041	O	TYR	A	500	-82.021	-2.755	62.916	1.00	25.52
4042	N	GLN	A	501	-80.125	-2.115	63.926	1.00	25.60
4043	CA	GLN	A	501	-80.560	-0.734	64.056	1.00	25.35
4044	CB	GLN	A	501	-80.978	-0.393	65.490	1.00	24.51
4045	CG	GLN	A	501	-79.863	-0.443	66.506	1.00	23.61
4046	CD	GLN	A	501	-80.323	-0.032	67.887	1.00	22.31
4047	OE1	GLN	A	501	-81.444	-0.365	68.298	1.00	22.73
4048	NE2	GLN	A	501	-79.454	0.672	68.625	1.00	22.12
4049	C	GLN	A	501	-79.435	0.160	63.598	1.00	26.27
4050	O	GLN	A	501	-78.257	-0.165	63.762	1.00	26.85
4051	N	MET	A	502	-79.808	1.270	62.979	1.00	26.86
4052	CA	MET	A	502	-78.845	2.268	62.569	1.00	27.40
4053	CB	MET	A	502	-78.806	2.401	61.057	1.00	26.94
4054	CG	MET	A	502	-77.888	1.412	60.401	1.00	27.66
4055	SD	MET	A	502	-78.030	1.525	58.635	1.00	28.81
4056	CE	MET	A	502	-77.003	0.102	58.082	1.00	24.15
4057	C	MET	A	502	-79.190	3.604	63.181	1.00	27.77
4058	O	MET	A	502	-80.338	4.049	63.127	1.00	28.13
4059	N	ILE	A	503	-78.190	4.233	63.781	1.00	28.03
4060	CA	ILE	A	503	-78.334	5.584	64.271	1.00	27.84
4061	CB	ILE	A	503	-77.488	5.792	65.531	1.00	27.52
4062	CG1	ILE	A	503	-77.796	4.709	66.570	1.00	27.03
4063	CD1	ILE	A	503	-79.208	4.770	67.149	1.00	25.17
4064	CG2	ILE	A	503	-77.738	7.178	66.120	1.00	28.26
4065	C	ILE	A	503	-77.807	6.397	63.101	1.00	28.13
4066	O	ILE	A	503	-76.624	6.346	62.789	1.00	28.71
4067	N	LEU	A	504	-78.698	7.097	62.415	1.00	28.67
4068	CA	LEU	A	504	-78.329	7.843	61.203	1.00	28.90
4069	CB	LEU	A	504	-79.428	7.690	60.152	1.00	28.20
4070	CG	LEU	A	504	-79.790	6.230	59.850	1.00	27.95

FIGURE 3 CB

A	B	C	D	E	F	G	H	I	J
4071	CD1	LEU	A	504	-81.155	6.123	59.168	1.00	26.23
4072	CD2	LEU	A	504	-78.690	5.603	58.982	1.00	27.03
4073	C	LEU	A	504	-78.123	9.320	61.467	1.00	29.01
4074	O	LEU	A	504	-78.904	9.931	62.178	1.00	28.73
4075	N	PRO	A	505	-77.066	9.873	60.896	1.00	29.74
4076	CA	PRO	A	505	-76.772	11.312	60.989	1.00	31.16
4077	CB	PRO	A	505	-75.549	11.487	60.085	1.00	31.00
4078	CG	PRO	A	505	-74.934	10.097	59.988	1.00	30.51
4079	CD	PRO	A	505	-76.051	9.127	60.134	1.00	29.57
4080	C	PRO	A	505	-77.904	12.176	60.441	1.00	32.28
4081	O	PRO	A	505	-78.521	11.795	59.440	1.00	32.31
4082	N	PRO	A	506	-78.141	13.323	61.075	1.00	33.17
4083	CA	PRO	A	506	-79.180	14.272	60.656	1.00	34.45
4084	CB	PRO	A	506	-78.816	15.543	61.445	1.00	34.54
4085	CG	PRO	A	506	-77.406	15.283	61.936	1.00	33.29
4086	CD	PRO	A	506	-77.405	13.821	62.252	1.00	33.00
4087	C	PRO	A	506	-79.089	14.580	59.178	1.00	35.78
4088	O	PRO	A	506	-77.982	14.612	58.641	1.00	35.88
4089	N	HIS	A	507	-80.231	14.829	58.537	1.00	37.58
4090	CA	HIS	A	507	-80.270	15.124	57.098	1.00	39.22
4091	CB	HIS	A	507	-79.544	16.443	56.772	1.00	39.61
4092	CG	HIS	A	507	-79.863	17.558	57.714	1.00	42.21
4093	ND1	HIS	A	507	-81.141	18.054	57.878	1.00	45.27
4094	CE1	HIS	A	507	-81.119	19.030	58.771	1.00	45.00
4095	NE2	HIS	A	507	-79.875	19.182	59.194	1.00	44.55
4096	CD2	HIS	A	507	-79.069	18.276	58.546	1.00	44.21
4097	C	HIS	A	507	-79.615	14.001	56.319	1.00	39.45
4098	O	HIS	A	507	-78.933	14.244	55.321	1.00	39.96
4099	N	PHE	A	508	-79.816	12.774	56.784	1.00	39.94
4100	CA	PHE	A	508	-79.205	11.603	56.160	1.00	40.03
4101	CB	PHE	A	508	-79.652	10.328	56.870	1.00	40.09
4102	CG	PHE	A	508	-79.126	9.095	56.238	1.00	39.51
4103	CD1	PHE	A	508	-77.812	8.718	56.435	1.00	38.08
4104	CE1	PHE	A	508	-77.318	7.584	55.838	1.00	39.51
4105	CZ	PHE	A	508	-78.135	6.829	55.023	1.00	38.62
4106	CE2	PHE	A	508	-79.440	7.203	54.817	1.00	38.70
4107	CD2	PHE	A	508	-79.933	8.331	55.411	1.00	39.14
4108	C	PHE	A	508	-79.514	11.488	54.678	1.00	40.20
4109	O	PHE	A	508	-80.662	11.542	54.283	1.00	40.31
4110	N	ASP	A	509	-78.484	11.302	53.862	1.00	40.70
4111	CA	ASP	A	509	-78.648	11.250	52.417	1.00	40.84
4112	CB	ASP	A	509	-77.932	12.445	51.793	1.00	41.19
4113	CG	ASP	A	509	-78.043	12.470	50.282	1.00	41.42
4114	OD1	ASP	A	509	-78.683	11.570	49.705	1.00	41.34
4115	OD2	ASP	A	509	-77.511	13.354	49.588	1.00	43.36
4116	C	ASP	A	509	-78.100	9.947	51.834	1.00	41.24
4117	O	ASP	A	509	-76.887	9.784	51.664	1.00	40.75
4118	N	LYS	A	510	-79.003	9.037	51.486	1.00	41.67
4119	CA	LYS	A	510	-78.603	7.714	51.023	1.00	42.33
4120	CB	LYS	A	510	-79.794	6.740	50.985	1.00	42.32
4121	CG	LYS	A	510	-80.791	6.917	49.848	1.00	43.62

FIGURE 3 CC

A	B	C	D	E	F	G	H	I	J
4122	CD	LYS	A	510	-82.090	6.159	50.171	1.00	45.42
4123	CE	LYS	A	510	-82.783	5.623	48.925	1.00	47.10
4124	NZ	LYS	A	510	-82.855	6.597	47.790	1.00	47.41
4125	C	LYS	A	510	-77.819	7.743	49.722	1.00	42.64
4126	O	LYS	A	510	-77.310	6.719	49.270	1.00	42.28
4127	N	SER	A	511	-77.692	8.930	49.138	1.00	43.25
4128	CA	SER	A	511	-76.883	9.063	47.932	1.00	43.68
4129	CB	SER	A	511	-77.379	10.205	47.035	1.00	43.86
4130	OG	SER	A	511	-76.905	11.463	47.490	1.00	44.84
4131	C	SER	A	511	-75.422	9.286	48.310	1.00	43.23
4132	O	SER	A	511	-74.537	9.182	47.463	1.00	43.76
4133	N	LYS	A	512	-75.169	9.579	49.580	1.00	42.43
4134	CA	LYS	A	512	-73.794	9.814	50.039	1.00	42.01
4135	CB	LYS	A	512	-73.739	11.035	50.962	1.00	42.16
4136	CG	LYS	A	512	-72.528	11.947	50.735	1.00	45.95
4137	CD	LYS	A	512	-71.856	12.418	52.058	1.00	48.83
4138	CE	LYS	A	512	-71.003	11.298	52.684	1.00	50.74
4139	NZ	LYS	A	512	-70.193	11.690	53.896	1.00	50.48
4140	C	LYS	A	512	-73.221	8.593	50.766	1.00	40.83
4141	O	LYS	A	512	-73.963	7.736	51.244	1.00	40.45
4142	N	LYS	A	513	-71.897	8.529	50.858	1.00	39.72
4143	CA	LYS	A	513	-71.213	7.427	51.522	1.00	38.40
4144	CB	LYS	A	513	-69.996	6.989	50.709	1.00	38.25
4145	CG	LYS	A	513	-70.307	6.475	49.304	1.00	39.78
4146	CD	LYS	A	513	-70.907	5.066	49.311	1.00	41.04
4147	CE	LYS	A	513	-71.269	4.597	47.895	1.00	41.89
4148	NZ	LYS	A	513	-72.232	5.519	47.227	1.00	41.74
4149	C	LYS	A	513	-70.757	7.856	52.912	1.00	37.48
4150	O	LYS	A	513	-69.953	8.789	53.048	1.00	37.92
4151	N	TYR	A	514	-71.268	7.195	53.946	1.00	35.23
4152	CA	TYR	A	514	-70.863	7.526	55.307	1.00	32.93
4153	CB	TYR	A	514	-72.074	7.652	56.209	1.00	32.28
4154	CG	TYR	A	514	-73.060	8.688	55.783	1.00	31.98
4155	CD1	TYR	A	514	-73.117	9.915	56.424	1.00	32.59
4156	CE1	TYR	A	514	-74.022	10.865	56.046	1.00	32.89
4157	CZ	TYR	A	514	-74.887	10.595	55.002	1.00	32.35
4158	OH	TYR	A	514	-75.793	11.546	54.617	1.00	32.72
4159	CE2	TYR	A	514	-74.842	9.393	54.348	1.00	30.78
4160	CD2	TYR	A	514	-73.935	8.447	54.742	1.00	31.30
4161	C	TYR	A	514	-69.997	6.439	55.914	1.00	32.06
4162	O	TYR	A	514	-70.142	5.254	55.583	1.00	31.54
4163	N	PRO	A	515	-69.129	6.849	56.839	1.00	30.48
4164	CA	PRO	A	515	-68.353	5.905	57.636	1.00	29.30
4165	CB	PRO	A	515	-67.539	6.808	58.574	1.00	28.88
4166	CG	PRO	A	515	-67.620	8.141	58.014	1.00	30.04
4167	CD	PRO	A	515	-68.874	8.248	57.218	1.00	29.90
4168	C	PRO	A	515	-69.334	5.150	58.500	1.00	28.02
4169	O	PRO	A	515	-70.384	5.677	58.871	1.00	27.42
4170	N	LEU	A	516	-68.986	3.937	58.869	1.00	27.30
4171	CA	LEU	A	516	-69.880	3.186	59.722	1.00	26.37
4172	CB	LEU	A	516	-70.689	2.172	58.915	1.00	26.70

FIGURE 3 CD

A	B	C	D	E	F	G	H	I	J
4173	CG	LEU	A	516	-71.737	1.421	59.739	1.00	27.51
4174	CD1	LEU	A	516	-71.143	0.107	60.286	1.00	28.75
4175	CD2	LEU	A	516	-72.930	1.111	58.894	1.00	27.87
4176	C	LEU	A	516	-69.103	2.517	60.836	1.00	25.59
4177	O	LEU	A	516	-68.033	1.944	60.620	1.00	25.32
4178	N	LEU	A	517	-69.632	2.648	62.041	1.00	24.37
4179	CA	LEU	A	517	-69.042	2.020	63.180	1.00	24.38
4180	CB	LEU	A	517	-68.763	3.039	64.260	1.00	24.08
4181	CG	LEU	A	517	-68.512	2.477	65.647	1.00	23.33
4182	CD1	LEU	A	517	-68.693	3.643	66.634	1.00	20.78
4183	CD2	LEU	A	517	-67.124	1.899	65.722	1.00	19.85
4184	C	LEU	A	517	-70.029	0.995	63.698	1.00	24.90
4185	O	LEU	A	517	-71.158	1.350	64.038	1.00	24.55
4186	N	LEU	A	518	-69.618	-0.264	63.748	1.00	24.40
4187	CA	LEU	A	518	-70.505	-1.278	64.260	1.00	24.51
4188	CB	LEU	A	518	-70.182	-2.654	63.651	1.00	24.62
4189	CG	LEU	A	518	-71.237	-3.727	63.874	1.00	25.59
4190	CD1	LEU	A	518	-72.561	-3.340	63.241	1.00	28.96
4191	CD2	LEU	A	518	-70.737	-5.037	63.300	1.00	25.58
4192	C	LEU	A	518	-70.385	-1.348	65.773	1.00	24.18
4193	O	LEU	A	518	-69.311	-1.628	66.306	1.00	24.04
4194	N	ASP	A	519	-71.491	-1.098	66.451	1.00	23.23
4195	CA	ASP	A	519	-71.551	-1.161	67.897	1.00	23.29
4196	CB	ASP	A	519	-72.561	-0.129	68.393	1.00	22.64
4197	CG	ASP	A	519	-72.754	-0.154	69.871	1.00	22.90
4198	OD1	ASP	A	519	-73.392	0.798	70.357	1.00	22.35
4199	OD2	ASP	A	519	-72.329	-1.057	70.641	1.00	22.78
4200	C	ASP	A	519	-71.965	-2.602	68.256	1.00	23.59
4201	O	ASP	A	519	-73.074	-3.029	67.947	1.00	23.11
4202	N	VAL	A	520	-71.067	-3.365	68.878	1.00	23.40
4203	CA	VAL	A	520	-71.405	-4.751	69.162	1.00	23.18
4204	CB	VAL	A	520	-70.447	-5.726	68.433	1.00	23.42
4205	CG1	VAL	A	520	-69.009	-5.290	68.619	1.00	24.66
4206	CG2	VAL	A	520	-70.757	-5.747	66.962	1.00	26.54
4207	C	VAL	A	520	-71.415	-5.157	70.621	1.00	22.20
4208	O	VAL	A	520	-70.640	-4.661	71.431	1.00	21.70
4209	N	TYR	A	521	-72.314	-6.074	70.946	1.00	21.43
4210	CA	TYR	A	521	-72.241	-6.747	72.222	1.00	20.51
4211	CB	TYR	A	521	-73.386	-6.371	73.173	1.00	20.48
4212	CG	TYR	A	521	-73.188	-7.015	74.510	1.00	20.85
4213	CD1	TYR	A	521	-73.942	-8.121	74.875	1.00	22.44
4214	CE1	TYR	A	521	-73.749	-8.749	76.081	1.00	21.90
4215	CZ	TYR	A	521	-72.776	-8.298	76.934	1.00	20.98
4216	OH	TYR	A	521	-72.628	-8.975	78.120	1.00	22.91
4217	CE2	TYR	A	521	-71.994	-7.202	76.606	1.00	17.30
4218	CD2	TYR	A	521	-72.190	-6.579	75.380	1.00	18.93
4219	C	TYR	A	521	-72.245	-8.204	71.802	1.00	20.17
4220	O	TYR	A	521	-71.201	-8.861	71.829	1.00	19.83
4221	N	ALA	A	522	-73.418	-8.699	71.398	1.00	19.73
4222	CA	ALA	A	522	-73.560	-10.023	70.790	1.00	19.27
4223	CB	ALA	A	522	-72.675	-10.150	69.568	1.00	18.32

FIGURE 3 CE

A	B	C	D	E	F	G	H	I	J
4224	C	ALA	A	522	-73.331	-11.219	71.682	1.00	19.90
4225	O	ALA	A	522	-73.012	-12.306	71.172	1.00	19.97
4226	N	GLY	A	523	-73.464	-11.032	72.990	1.00	19.34
4227	CA	GLY	A	523	-73.369	-12.135	73.907	1.00	19.32
4228	C	GLY	A	523	-74.632	-12.946	73.757	1.00	20.03
4229	O	GLY	A	523	-75.568	-12.532	73.091	1.00	20.55
4230	N	PRO	A	524	-74.663	-14.113	74.377	1.00	20.13
4231	CA	PRO	A	524	-75.830	-14.988	74.295	1.00	20.26
4232	CB	PRO	A	524	-75.374	-16.244	75.038	1.00	20.77
4233	CG	PRO	A	524	-73.854	-16.126	75.050	1.00	20.77
4234	CD	PRO	A	524	-73.578	-14.674	75.200	1.00	19.33
4235	C	PRO	A	524	-77.058	-14.366	74.956	1.00	20.74
4236	O	PRO	A	524	-77.008	-13.932	76.107	1.00	20.66
4237	N	CYS	A	525	-78.149	-14.328	74.197	1.00	20.18
4238	CA	CYS	A	525	-79.388	-13.695	74.587	1.00	20.82
4239	CB	CYS	A	525	-79.949	-14.220	75.910	1.00	20.83
4240	SG	CYS	A	525	-81.741	-13.933	76.063	1.00	22.40
4241	C	CYS	A	525	-79.295	-12.172	74.590	1.00	21.05
4242	O	CYS	A	525	-80.100	-11.502	75.207	1.00	21.55
4243	N	SER	A	526	-78.337	-11.617	73.874	1.00	21.27
4244	CA	SER	A	526	-78.270	-10.175	73.804	1.00	21.42
4245	CB	SER	A	526	-76.872	-9.726	73.409	1.00	21.05
4246	OG	SER	A	526	-76.479	-10.308	72.175	1.00	23.05
4247	C	SER	A	526	-79.276	-9.632	72.799	1.00	21.89
4248	O	SER	A	526	-79.824	-10.374	71.944	1.00	21.77
4249	N	GLN	A	527	-79.518	-8.333	72.903	1.00	21.46
4250	CA	GLN	A	527	-80.321	-7.637	71.925	1.00	22.06
4251	CB	GLN	A	527	-81.803	-7.630	72.305	1.00	22.11
4252	CG	GLN	A	527	-82.670	-6.928	71.305	1.00	20.73
4253	CD	GLN	A	527	-84.138	-7.223	71.507	1.00	22.19
4254	OE1	GLN	A	527	-84.795	-6.589	72.323	1.00	25.90
4255	NE2	GLN	A	527	-84.652	-8.177	70.774	1.00	20.97
4256	C	GLN	A	527	-79.809	-6.226	71.867	1.00	22.91
4257	O	GLN	A	527	-79.926	-5.473	72.839	1.00	23.38
4258	N	LYS	A	528	-79.235	-5.880	70.724	1.00	23.75
4259	CA	LYS	A	528	-78.710	-4.557	70.470	1.00	24.57
4260	CB	LYS	A	528	-77.282	-4.675	69.951	1.00	24.43
4261	CG	LYS	A	528	-76.278	-5.006	71.025	1.00	25.17
4262	CD	LYS	A	528	-76.446	-4.083	72.209	1.00	26.22
4263	CE	LYS	A	528	-75.577	-2.871	72.089	1.00	28.78
4264	NZ	LYS	A	528	-74.300	-3.184	71.422	1.00	30.11
4265	C	LYS	A	528	-79.540	-3.789	69.434	1.00	25.60
4266	O	LYS	A	528	-79.317	-2.603	69.228	1.00	25.41
4267	N	ALA	A	529	-80.443	-4.472	68.732	1.00	26.51
4268	CA	ALA	A	529	-81.299	-3.791	67.759	1.00	27.24
4269	CB	ALA	A	529	-81.477	-4.612	66.498	1.00	26.91
4270	C	ALA	A	529	-82.603	-3.585	68.489	1.00	27.74
4271	O	ALA	A	529	-83.333	-4.533	68.740	1.00	27.80
4272	N	ASP	A	530	-82.887	-2.324	68.814	1.00	28.77
4273	CA	ASP	A	530	-83.936	-1.953	69.769	1.00	28.97
4274	CB	ASP	A	530	-83.238	-1.319	71.013	1.00	29.38



FIGURE 3 CF

A	B	C	D	E	F	G	H	I	J
4275	CG	ASP	A	530	-83.489	-2.074	72.224	1.00	32.06
4276	OD1	ASP	A	530	-84.519	-2.802	72.207	1.00	38.06
4277	OD2	ASP	A	530	-82.737	-2.052	73.222	1.00	33.89
4278	C	ASP	A	530	-84.882	-0.874	69.325	1.00	28.27
4279	O	ASP	A	530	-84.580	-0.095	68.440	1.00	28.50
4280	N	THR	A	531	-85.967	-0.753	70.068	1.00	27.52
4281	CA	THR	A	531	-86.940	0.280	69.847	1.00	28.07
4282	CB	THR	A	531	-88.324	-0.391	69.892	1.00	28.44
4283	OG1	THR	A	531	-89.032	-0.192	68.645	1.00	30.33
4284	CG2	THR	A	531	-89.171	0.162	70.967	1.00	26.74
4285	C	THR	A	531	-86.755	1.388	70.928	1.00	28.23
4286	O	THR	A	531	-87.547	2.323	71.048	1.00	28.80
4287	N	VAL	A	532	-85.679	1.288	71.695	1.00	27.21
4288	CA	VAL	A	532	-85.408	2.263	72.741	1.00	26.82
4289	CB	VAL	A	532	-84.515	1.645	73.848	1.00	26.35
4290	CG1	VAL	A	532	-84.117	2.683	74.881	1.00	25.52
4291	CG2	VAL	A	532	-85.231	0.453	74.497	1.00	24.22
4292	C	VAL	A	532	-84.752	3.544	72.224	1.00	26.84
4293	O	VAL	A	532	-83.931	3.506	71.319	1.00	26.29
4294	N	PHE	A	533	-85.158	4.680	72.786	1.00	27.07
4295	CA	PHE	A	533	-84.536	5.958	72.479	1.00	27.09
4296	CB	PHE	A	533	-85.508	7.102	72.734	1.00	27.71
4297	CG	PHE	A	533	-84.912	8.456	72.501	1.00	29.13
4298	CD1	PHE	A	533	-84.696	8.912	71.215	1.00	32.14
4299	CE1	PHE	A	533	-84.126	10.154	70.995	1.00	33.62
4300	CZ	PHE	A	533	-83.766	10.949	72.073	1.00	31.19
4301	CE2	PHE	A	533	-83.974	10.499	73.354	1.00	30.70
4302	CD2	PHE	A	533	-84.534	9.261	73.568	1.00	29.48
4303	C	PHE	A	533	-83.391	6.127	73.440	1.00	26.36
4304	O	PHE	A	533	-83.572	5.944	74.631	1.00	25.98
4305	N	ARG	A	534	-82.219	6.494	72.943	1.00	26.27
4306	CA	ARG	A	534	-81.077	6.715	73.827	1.00	26.31
4307	CB	ARG	A	534	-80.054	5.544	73.732	1.00	26.04
4308	CG	ARG	A	534	-80.631	4.172	74.077	1.00	26.82
4309	CD	ARG	A	534	-79.697	2.950	73.923	1.00	27.08
4310	NE	ARG	A	534	-80.539	1.780	73.653	1.00	31.36
4311	CZ	ARG	A	534	-80.795	0.855	74.552	1.00	31.52
4312	NH1	ARG	A	534	-80.229	0.938	75.755	1.00	36.57
4313	NH2	ARG	A	534	-81.598	-0.147	74.268	1.00	25.14
4314	C	ARG	A	534	-80.366	8.013	73.470	1.00	26.15
4315	O	ARG	A	534	-80.453	8.471	72.345	1.00	26.29
4316	N	LEU	A	535	-79.665	8.595	74.445	1.00	26.18
4317	CA	LEU	A	535	-78.742	9.696	74.191	1.00	25.53
4318	CB	LEU	A	535	-79.121	10.946	74.943	1.00	25.52
4319	CG	LEU	A	535	-80.485	11.483	74.539	1.00	26.59
4320	CD1	LEU	A	535	-80.859	12.623	75.456	1.00	25.37
4321	CD2	LEU	A	535	-80.462	11.900	73.083	1.00	28.33
4322	C	LEU	A	535	-77.434	9.149	74.709	1.00	25.14
4323	O	LEU	A	535	-77.250	8.983	75.912	1.00	25.10
4324	N	ASN	A	536	-76.537	8.833	73.791	1.00	24.32
4325	CA	ASN	A	536	-75.314	8.160	74.164	1.00	24.10

FIGURE 3 CG

A	B	C	D	E	F	G	H	I	J
4326	CB	ASN	A	536	-75.542	6.637	74.171	1.00	23.27
4327	CG	ASN	A	536	-75.957	6.117	72.820	1.00	23.12
4328	OD1	ASN	A	536	-75.947	6.849	71.853	1.00	24.61
4329	ND2	ASN	A	536	-76.303	4.842	72.740	1.00	24.77
4330	C	ASN	A	536	-74.237	8.537	73.187	1.00	23.67
4331	O	ASN	A	536	-74.445	9.365	72.308	1.00	24.61
4332	N	TRP	A	537	-73.090	7.908	73.320	1.00	23.30
4333	CA	TRP	A	537	-71.958	8.210	72.460	1.00	22.74
4334	CB	TRP	A	537	-70.858	7.203	72.740	1.00	22.48
4335	CG	TRP	A	537	-69.576	7.552	72.158	1.00	22.46
4336	CD1	TRP	A	537	-68.950	8.775	72.196	1.00	22.69
4337	NE1	TRP	A	537	-67.734	8.697	71.564	1.00	21.09
4338	CE2	TRP	A	537	-67.535	7.405	71.150	1.00	21.17
4339	CD2	TRP	A	537	-68.693	6.667	71.490	1.00	21.98
4340	CE3	TRP	A	537	-68.736	5.299	71.187	1.00	20.10
4341	CZ3	TRP	A	537	-67.682	4.743	70.527	1.00	20.95
4342	CH2	TRP	A	537	-66.556	5.513	70.172	1.00	22.34
4343	CZ2	TRP	A	537	-66.468	6.843	70.474	1.00	18.72
4344	C	TRP	A	537	-72.346	8.138	70.989	1.00	22.41
4345	O	TRP	A	537	-71.956	9.001	70.194	1.00	22.36
4346	N	ALA	A	538	-73.086	7.098	70.621	1.00	21.66
4347	CA	ALA	A	538	-73.546	6.952	69.234	1.00	22.46
4348	CB	ALA	A	538	-74.383	5.682	69.071	1.00	21.75
4349	C	ALA	A	538	-74.351	8.187	68.780	1.00	22.98
4350	O	ALA	A	538	-74.259	8.606	67.626	1.00	23.16
4351	N	THR	A	539	-75.139	8.762	69.681	1.00	23.35
4352	CA	THR	A	539	-75.881	9.972	69.340	1.00	24.60
4353	CB	THR	A	539	-76.604	10.534	70.559	1.00	24.65
4354	OG1	THR	A	539	-77.309	9.493	71.232	1.00	23.63
4355	CG2	THR	A	539	-77.680	11.492	70.106	1.00	25.07
4356	C	THR	A	539	-74.925	11.050	68.851	1.00	25.20
4357	O	THR	A	539	-75.174	11.709	67.823	1.00	25.06
4358	N	TYR	A	540	-73.834	11.225	69.598	1.00	25.14
4359	CA	TYR	A	540	-72.796	12.190	69.231	1.00	25.58
4360	CB	TYR	A	540	-71.786	12.369	70.379	1.00	25.49
4361	CG	TYR	A	540	-70.389	12.592	69.877	1.00	26.80
4362	CD1	TYR	A	540	-69.411	11.604	69.993	1.00	27.83
4363	CE1	TYR	A	540	-68.131	11.813	69.515	1.00	28.04
4364	CZ	TYR	A	540	-67.840	13.016	68.896	1.00	30.52
4365	OH	TYR	A	540	-66.589	13.284	68.395	1.00	31.52
4366	CE2	TYR	A	540	-68.812	13.986	68.754	1.00	28.42
4367	CD2	TYR	A	540	-70.053	13.779	69.243	1.00	27.18
4368	C	TYR	A	540	-72.076	11.825	67.935	1.00	25.78
4369	O	TYR	A	540	-71.939	12.653	67.046	1.00	25.81
4370	N	LEU	A	541	-71.590	10.593	67.820	1.00	26.96
4371	CA	LEU	A	541	-70.898	10.186	66.590	1.00	27.12
4372	CB	LEU	A	541	-70.495	8.711	66.645	1.00	27.08
4373	CG	LEU	A	541	-69.503	8.443	67.781	1.00	26.42
4374	CD1	LEU	A	541	-69.291	6.967	67.989	1.00	23.43
4375	CD2	LEU	A	541	-68.189	9.168	67.503	1.00	23.14
4376	C	LEU	A	541	-71.836	10.411	65.430	1.00	27.84

FIGURE 3 CH

A	B	C	D	E	F	G	H	I	J
4377	O	LEU	A	541	-71.422	10.853	64.358	1.00	27.48
4378	N	ALA	A	542	-73.114	10.125	65.656	1.00	28.30
4379	CA	ALA	A	542	-74.115	10.352	64.627	1.00	29.47
4380	CB	ALA	A	542	-75.380	9.549	64.914	1.00	28.86
4381	C	ALA	A	542	-74.428	11.866	64.430	1.00	30.18
4382	O	ALA	A	542	-74.312	12.373	63.326	1.00	30.01
4383	N	SER	A	543	-74.808	12.565	65.492	1.00	30.73
4384	CA	SER	A	543	-75.175	13.964	65.364	1.00	31.65
4385	CB	SER	A	543	-75.760	14.473	66.678	1.00	31.70
4386	OG	SER	A	543	-75.898	15.877	66.643	1.00	34.90
4387	C	SER	A	543	-74.012	14.847	64.909	1.00	31.73
4388	O	SER	A	543	-74.148	15.607	63.954	1.00	31.61
4389	N	THR	A	544	-72.865	14.719	65.567	1.00	31.83
4390	CA	THR	A	544	-71.720	15.573	65.256	1.00	31.83
4391	CB	THR	A	544	-70.999	15.979	66.550	1.00	31.65
4392	OG1	THR	A	544	-71.915	16.668	67.412	1.00	33.07
4393	CG2	THR	A	544	-69.948	16.999	66.255	1.00	31.61
4394	C	THR	A	544	-70.691	15.051	64.240	1.00	31.45
4395	O	THR	A	544	-70.269	15.777	63.342	1.00	30.92
4396	N	GLU	A	545	-70.259	13.806	64.369	1.00	31.31
4397	CA	GLU	A	545	-69.229	13.351	63.448	1.00	30.80
4398	CB	GLU	A	545	-68.293	12.348	64.124	1.00	30.72
4399	CG	GLU	A	545	-67.769	12.799	65.480	1.00	30.89
4400	CD	GLU	A	545	-67.024	14.130	65.432	1.00	32.37
4401	OE1	GLU	A	545	-66.896	14.781	66.495	1.00	33.28
4402	OE2	GLU	A	545	-66.547	14.506	64.341	1.00	30.39
4403	C	GLU	A	545	-69.785	12.793	62.140	1.00	30.42
4404	O	GLU	A	545	-69.031	12.460	61.252	1.00	30.29
4405	N	ASN	A	546	-71.106	12.700	62.032	1.00	30.63
4406	CA	ASN	A	546	-71.774	12.130	60.853	1.00	30.52
4407	CB	ASN	A	546	-71.485	12.942	59.586	1.00	31.73
4408	CG	ASN	A	546	-72.182	14.285	59.585	1.00	34.27
4409	OD1	ASN	A	546	-71.551	15.324	59.354	1.00	38.86
4410	ND2	ASN	A	546	-73.486	14.277	59.845	1.00	35.24
4411	C	ASN	A	546	-71.436	10.667	60.587	1.00	29.32
4412	O	ASN	A	546	-71.340	10.247	59.438	1.00	29.52
4413	N	ILE	A	547	-71.243	9.890	61.637	1.00	27.84
4414	CA	ILE	A	547	-70.946	8.482	61.450	1.00	26.64
4415	CB	ILE	A	547	-69.911	8.034	62.500	1.00	26.27
4416	CG1	ILE	A	547	-68.565	8.719	62.236	1.00	26.48
4417	CD1	ILE	A	547	-67.665	8.765	63.449	1.00	26.42
4418	CG2	ILE	A	547	-69.759	6.518	62.502	1.00	24.99
4419	C	ILE	A	547	-72.220	7.680	61.634	1.00	25.98
4420	O	ILE	A	547	-72.941	7.939	62.561	1.00	26.13
4421	N	ILE	A	548	-72.505	6.723	60.758	1.00	25.24
4422	CA	ILE	A	548	-73.610	5.804	61.027	1.00	24.49
4423	CB	ILE	A	548	-74.033	5.021	59.767	1.00	23.91
4424	CG1	ILE	A	548	-74.572	5.965	58.682	1.00	24.32
4425	CD1	ILE	A	548	-74.462	5.394	57.274	1.00	24.06
4426	CG2	ILE	A	548	-75.111	4.003	60.143	1.00	21.57
4427	C	ILE	A	548	-73.119	4.803	62.051	1.00	24.50

FIGURE 3 CI

A	B	C	D	E	F	G	H	I	J
4428	O	ILE	A	548	-72.060	4.207	61.885	1.00	24.29
4429	N	VAL	A	549	-73.853	4.616	63.125	1.00	25.27
4430	CA	VAL	A	549	-73.409	3.599	64.062	1.00	26.24
4431	CB	VAL	A	549	-72.850	4.126	65.404	1.00	26.50
4432	CG1	VAL	A	549	-73.106	5.599	65.570	1.00	26.95
4433	CG2	VAL	A	549	-73.347	3.282	66.589	1.00	25.59
4434	C	VAL	A	549	-74.476	2.539	64.188	1.00	26.57
4435	O	VAL	A	549	-75.598	2.774	64.634	1.00	26.99
4436	N	ALA	A	550	-74.095	1.333	63.782	1.00	26.46
4437	CA	ALA	A	550	-75.041	0.273	63.625	1.00	25.36
4438	CB	ALA	A	550	-74.866	-0.307	62.236	1.00	25.10
4439	C	ALA	A	550	-74.859	-0.831	64.662	1.00	25.84
4440	O	ALA	A	550	-73.787	-0.974	65.245	1.00	25.55
4441	N	SER	A	551	-75.911	-1.618	64.883	1.00	25.67
4442	CA	SER	A	551	-75.848	-2.771	65.780	1.00	25.80
4443	CB	SER	A	551	-76.385	-2.448	67.169	1.00	25.63
4444	OG	SER	A	551	-75.605	-1.427	67.767	1.00	26.99
4445	C	SER	A	551	-76.639	-3.899	65.148	1.00	25.66
4446	O	SER	A	551	-77.605	-3.679	64.426	1.00	26.15
4447	N	PHE	A	552	-76.233	-5.119	65.415	1.00	25.15
4448	CA	PHE	A	552	-76.852	-6.229	64.729	1.00	23.89
4449	CB	PHE	A	552	-76.036	-6.571	63.486	1.00	22.93
4450	CG	PHE	A	552	-76.510	-7.793	62.761	1.00	22.92
4451	CD1	PHE	A	552	-77.566	-7.723	61.863	1.00	23.12
4452	CE1	PHE	A	552	-77.982	-8.855	61.194	1.00	23.52
4453	CZ	PHE	A	552	-77.326	-10.068	61.406	1.00	20.98
4454	CE2	PHE	A	552	-76.282	-10.127	62.271	1.00	19.73
4455	CD2	PHE	A	552	-75.880	-9.003	62.940	1.00	19.74
4456	C	PHE	A	552	-76.972	-7.425	65.656	1.00	23.86
4457	O	PHE	A	552	-76.033	-7.782	66.366	1.00	22.69
4458	N	ASP	A	553	-78.165	-7.999	65.666	1.00	23.23
4459	CA	ASP	A	553	-78.432	-9.135	66.484	1.00	23.30
4460	CB	ASP	A	553	-79.772	-8.961	67.171	1.00	22.96
4461	CG	ASP	A	553	-79.765	-7.861	68.211	1.00	24.34
4462	OD1	ASP	A	553	-78.682	-7.518	68.751	1.00	22.95
4463	OD2	ASP	A	553	-80.830	-7.297	68.565	1.00	24.54
4464	C	ASP	A	553	-78.444	-10.385	65.602	1.00	23.11
4465	O	ASP	A	553	-79.450	-10.696	64.959	1.00	23.44
4466	N	GLY	A	554	-77.324	-11.094	65.586	1.00	22.92
4467	CA	GLY	A	554	-77.202	-12.304	64.804	1.00	23.01
4468	C	GLY	A	554	-77.458	-13.510	65.656	1.00	23.19
4469	O	GLY	A	554	-78.190	-13.475	66.636	1.00	24.71
4470	N	ARG	A	555	-76.852	-14.605	65.271	1.00	22.95
4471	CA	ARG	A	555	-77.042	-15.828	66.009	1.00	22.74
4472	CB	ARG	A	555	-76.322	-16.959	65.298	1.00	22.40
4473	CG	ARG	A	555	-77.096	-17.432	64.085	1.00	22.64
4474	CD	ARG	A	555	-76.412	-18.535	63.298	1.00	21.05
4475	NE	ARG	A	555	-75.340	-17.971	62.495	1.00	21.39
4476	CZ	ARG	A	555	-74.609	-18.628	61.615	1.00	20.88
4477	NH1	ARG	A	555	-74.797	-19.922	61.413	1.00	19.83
4478	NH2	ARG	A	555	-73.660	-17.977	60.951	1.00	22.48

FIGURE 3 CJ

A	B	C	D	E	F	G	H	I	J
4479	C	ARG	A	555	-76.548	-15.698	67.438	1.00	22.46
4480	O	ARG	A	555	-75.517	-15.062	67.704	1.00	22.62
4481	N	GLY	A	556	-77.261	-16.343	68.344	1.00	21.79
4482	CA	GLY	A	556	-76.940	-16.274	69.752	1.00	22.02
4483	C	GLY	A	556	-77.758	-15.169	70.399	1.00	22.15
4484	O	GLY	A	556	-77.910	-15.150	71.614	1.00	22.08
4485	N	SER	A	557	-78.266	-14.248	69.581	1.00	22.09
4486	CA	SER	A	557	-79.101	-13.168	70.070	1.00	22.50
4487	CB	SER	A	557	-79.369	-12.109	68.983	1.00	22.77
4488	OG	SER	A	557	-80.178	-12.602	67.952	1.00	23.68
4489	C	SER	A	557	-80.389	-13.713	70.660	1.00	22.46
4490	O	SER	A	557	-80.796	-14.855	70.370	1.00	23.12
4491	N	GLY	A	558	-81.031	-12.903	71.495	1.00	21.95
4492	CA	GLY	A	558	-82.172	-13.372	72.244	1.00	21.91
4493	C	GLY	A	558	-83.538	-12.908	71.794	1.00	22.32
4494	O	GLY	A	558	-83.681	-12.138	70.843	1.00	22.48
4495	N	TYR	A	559	-84.542	-13.428	72.485	1.00	22.60
4496	CA	TYR	A	559	-85.936	-13.011	72.337	1.00	23.63
4497	CB	TYR	A	559	-86.046	-11.519	72.619	1.00	23.18
4498	CG	TYR	A	559	-85.309	-11.140	73.881	1.00	22.60
4499	CD1	TYR	A	559	-84.093	-10.443	73.820	1.00	21.94
4500	CE1	TYR	A	597	-83.414	-10.103	74.965	1.00	22.93
4501	CZ	TYR	A	597	-83.944	-10.442	76.206	1.00	22.63
4502	OH	TYR	A	597	-83.250	-10.095	77.353	1.00	25.67
4503	CE2	TYR	A	597	-85.142	-11.122	76.293	1.00	20.25
4504	CD2	TYR	A	597	-85.812	-11.484	75.126	1.00	19.76
4505	C	TYR	A	597	-86.554	-13.362	71.007	1.00	24.02
4506	O	TYR	A	597	-87.590	-12.798	70.612	1.00	24.15
4507	N	GLN	A	598	-85.919	-14.307	70.320	1.00	24.09
4508	CA	GLN	A	598	-86.393	-14.734	69.006	1.00	23.89
4509	CB	GLN	A	598	-85.471	-14.205	67.913	1.00	23.48
4510	CG	GLN	A	598	-85.151	-12.749	68.029	1.00	25.19
4511	CD	GLN	A	598	-83.789	-12.393	67.462	1.00	25.22
4512	OE1	GLN	A	598	-83.662	-12.141	66.275	1.00	25.93
4513	NE2	GLN	A	598	-82.782	-12.350	68.314	1.00	25.78
4514	C	GLN	A	598	-86.458	-16.259	68.938	1.00	23.85
4515	O	GLN	A	598	-86.474	-16.844	67.859	1.00	24.91
4516	N	GLY	A	599	-86.484	-16.906	70.089	1.00	23.84
4517	CA	GLY	A	599	-86.520	-18.351	70.119	1.00	23.61
4518	C	GLY	A	599	-85.167	-19.004	70.143	1.00	23.59
4519	O	GLY	A	599	-84.167	-18.411	69.753	1.00	24.02
4520	N	ASP	A	600	-85.136	-20.262	70.569	1.00	24.62
4521	CA	ASP	A	600	-83.873	-20.968	70.762	1.00	25.34
4522	CB	ASP	A	600	-84.087	-22.226	71.608	1.00	26.00
4523	CG	ASP	A	600	-84.538	-21.913	73.024	1.00	27.86
4524	OD1	ASP	A	600	-84.353	-20.748	73.464	1.00	28.97
4525	OD2	ASP	A	600	-85.075	-22.777	73.764	1.00	27.91
4526	C	ASP	A	600	-83.094	-21.335	69.497	1.00	25.39
4527	O	ASP	A	600	-81.882	-21.546	69.574	1.00	25.11
4528	N	LYS	A	601	-83.748	-21.442	68.348	1.00	25.53
4529	CA	LYS	A	601	-82.980	-21.863	67.173	1.00	26.86

FIGURE 3 CK

A	B	C	D	E	F	G	H	I	J
4530	CB	LYS	A	563	-83.846	-21.977	65.921	1.00	27.77
4531	CG	LYS	A	563	-83.032	-22.073	64.615	1.00	32.25
4532	CD	LYS	A	563	-82.349	-23.441	64.443	1.00	38.03
4533	CE	LYS	A	563	-81.407	-23.456	63.234	1.00	41.98
4534	NZ	LYS	A	563	-81.007	-24.894	62.897	1.00	42.27
4535	C	LYS	A	563	-81.846	-20.852	66.973	1.00	25.87
4536	O	LYS	A	563	-80.723	-21.211	66.659	1.00	25.10
4537	N	ILE	A	564	-82.178	-19.585	67.181	1.00	25.38
4538	CA	ILE	A	564	-81.222	-18.495	67.116	1.00	24.64
4539	CB	ILE	A	564	-81.978	-17.204	66.855	1.00	24.95
4540	CG1	ILE	A	564	-82.436	-17.185	65.392	1.00	22.41
4541	CD1	ILE	A	564	-83.370	-16.032	65.032	1.00	23.88
4542	CG2	ILE	A	564	-81.101	-15.977	67.264	1.00	24.06
4543	C	ILE	A	564	-80.378	-18.371	68.401	1.00	24.04
4544	O	ILE	A	564	-79.169	-18.318	68.347	1.00	23.29
4545	N	MET	A	565	-81.011	-18.361	69.560	1.00	24.02
4546	CA	MET	A	565	-80.231	-18.205	70.781	1.00	24.07
4547	CB	MET	A	565	-81.124	-18.123	72.021	1.00	24.25
4548	CG	MET	A	565	-80.342	-17.586	73.226	1.00	23.18
4549	SD	MET	A	565	-81.402	-17.166	74.596	1.00	24.95
4550	CE	MET	A	565	-81.912	-18.826	75.177	1.00	18.04
4551	C	MET	A	565	-79.213	-19.307	70.983	1.00	23.98
4552	O	MET	A	565	-78.067	-19.051	71.322	1.00	23.77
4553	N	HIS	A	566	-79.626	-20.541	70.761	1.00	24.13
4554	CA	HIS	A	566	-78.751	-21.677	71.040	1.00	24.24
4555	CB	HIS	A	566	-79.583	-22.923	71.332	1.00	24.50
4556	CG	HIS	A	566	-80.272	-22.895	72.664	1.00	25.45
4557	ND1	HIS	A	566	-80.001	-21.945	73.626	1.00	24.83
4558	CE1	HIS	A	566	-80.745	-22.178	74.692	1.00	26.00
4559	NE2	HIS	A	566	-81.482	-23.250	74.460	1.00	26.73
4560	CD2	HIS	A	566	-81.209	-23.712	73.197	1.00	24.92
4561	C	HIS	A	566	-77.758	-21.982	69.930	1.00	24.42
4562	O	HIS	A	566	-76.948	-22.908	70.055	1.00	24.12
4563	N	ALA	A	567	-77.799	-21.206	68.850	1.00	24.23
4564	CA	ALA	A	567	-76.884	-21.470	67.754	1.00	24.02
4565	CB	ALA	A	567	-77.084	-20.502	66.634	1.00	23.70
4566	C	ALA	A	567	-75.451	-21.446	68.242	1.00	24.52
4567	O	ALA	A	567	-74.596	-22.139	67.679	1.00	24.73
4568	N	ILE	A	568	-75.173	-20.678	69.303	1.00	24.43
4569	CA	ILE	A	568	-73.782	-20.566	69.754	1.00	24.25
4570	CB	ILE	A	568	-73.323	-19.079	69.995	1.00	24.90
4571	CG1	ILE	A	568	-74.283	-18.269	70.866	1.00	24.12
4572	CD1	ILE	A	568	-74.629	-18.870	72.199	1.00	26.81
4573	CG2	ILE	A	568	-73.190	-18.331	68.659	1.00	24.26
4574	C	ILE	A	568	-73.355	-21.488	70.893	1.00	24.48
4575	O	ILE	A	568	-72.216	-21.409	71.337	1.00	24.62
4576	N	ASN	A	569	-74.254	-22.368	71.332	1.00	24.30
4577	CA	ASN	A	569	-73.985	-23.324	72.406	1.00	24.74
4578	CB	ASN	A	569	-75.171	-24.288	72.582	1.00	25.22
4579	CG	ASN	A	569	-74.954	-25.288	73.711	1.00	27.56
4580	OD1	ASN	A	569	-74.955	-26.518	73.490	1.00	30.92

FIGURE 3 CL

A	B	C	D	E	F	G	H	I	J
4581	ND2	ASN	A	569	-74.749	-24.780	74.917	1.00	24.95
4582	C	ASN	A	569	-72.709	-24.117	72.207	1.00	25.11
4583	O	ASN	A	569	-72.523	-24.770	71.170	1.00	24.85
4584	N	ARG	A	570	-71.840	-24.050	73.216	1.00	25.17
4585	CA	ARG	A	570	-70.553	-24.717	73.226	1.00	25.82
4586	CB	ARG	A	570	-70.736	-26.230	73.022	1.00	26.02
4587	CG	ARG	A	570	-71.375	-26.931	74.213	1.00	27.93
4588	CD	ARG	A	570	-71.675	-28.402	73.966	1.00	31.13
4589	NE	ARG	A	570	-70.452	-29.132	73.648	1.00	32.29
4590	CZ	ARG	A	570	-69.690	-29.682	74.562	1.00	33.17
4591	NH1	ARG	A	570	-68.579	-30.323	74.215	1.00	33.29
4592	NH2	ARG	A	570	-70.042	-29.578	75.838	1.00	34.18
4593	C	ARG	A	570	-69.628	-24.134	72.167	1.00	26.12
4594	O	ARG	A	570	-68.524	-24.637	71.941	1.00	25.56
4595	N	ARG	A	571	-70.060	-23.043	71.553	1.00	26.31
4596	CA	ARG	A	571	-69.362	-22.561	70.384	1.00	27.64
4597	CB	ARG	A	571	-70.152	-23.020	69.150	1.00	27.88
4598	CG	ARG	A	571	-69.302	-23.654	68.055	1.00	33.59
4599	CD	ARG	A	571	-69.041	-25.192	68.139	1.00	38.10
4600	NE	ARG	A	571	-68.118	-25.568	69.192	1.00	42.59
4601	CZ	ARG	A	571	-67.621	-26.797	69.384	1.00	44.77
4602	NH1	ARG	A	571	-66.813	-27.026	70.412	1.00	43.83
4603	NH2	ARG	A	571	-67.927	-27.795	68.568	1.00	44.81
4604	C	ARG	A	571	-69.154	-21.035	70.397	1.00	26.90
4605	O	ARG	A	571	-69.220	-20.351	69.371	1.00	26.51
4606	N	LEU	A	572	-68.901	-20.509	71.580	1.00	26.30
4607	CA	LEU	A	572	-68.638	-19.081	71.726	1.00	25.74
4608	CB	LEU	A	572	-68.273	-18.761	73.180	1.00	25.20
4609	CG	LEU	A	572	-69.414	-18.145	73.987	1.00	24.72
4610	CD1	LEU	A	572	-69.184	-18.128	75.494	1.00	24.38
4611	CD2	LEU	A	572	-70.753	-18.727	73.627	1.00	22.29
4612	C	LEU	A	572	-67.523	-18.630	70.798	1.00	24.94
4613	O	LEU	A	572	-66.514	-19.328	70.620	1.00	25.41
4614	N	GLY	A	573	-67.690	-17.461	70.206	1.00	23.52
4615	CA	GLY	A	573	-66.667	-16.951	69.324	1.00	23.38
4616	C	GLY	A	573	-66.708	-17.500	67.913	1.00	23.07
4617	O	GLY	A	573	-65.670	-17.588	67.251	1.00	23.52
4618	N	THR	A	574	-67.878	-17.917	67.458	1.00	22.34
4619	CA	THR	A	574	-67.989	-18.402	66.090	1.00	22.60
4620	CB	THR	A	574	-68.252	-19.912	66.024	1.00	22.64
4621	OG1	THR	A	574	-69.451	-20.210	66.750	1.00	22.61
4622	CG2	THR	A	574	-67.123	-20.695	66.740	1.00	21.83
4623	C	THR	A	574	-69.052	-17.677	65.318	1.00	22.31
4624	O	THR	A	574	-68.776	-16.674	64.670	1.00	22.50
4625	N	PHE	A	575	-70.274	-18.175	65.388	1.00	23.15
4626	CA	PHE	A	575	-71.341	-17.610	64.562	1.00	24.35
4627	CB	PHE	A	575	-72.613	-18.479	64.579	1.00	25.15
4628	CG	PHE	A	575	-72.396	-19.952	64.170	1.00	26.50
4629	CD1	PHE	A	575	-71.768	-20.288	62.975	1.00	28.79
4630	CE1	PHE	A	575	-71.591	-21.620	62.598	1.00	30.18
4631	CZ	PHE	A	575	-72.047	-22.650	63.422	1.00	31.75

FIGURE 3 CM

A	B	C	D	E	F	G	H	I	J
4632	CE2	PHE	A	575	-72.684	-22.335	64.609	1.00	30.94
4633	CD2	PHE	A	575	-72.866	-20.969	64.973	1.00	27.57
4634	C	PHE	A	575	-71.675	-16.180	64.917	1.00	24.87
4635	O	PHE	A	575	-71.877	-15.359	64.024	1.00	26.10
4636	N	GLU	A	576	-71.723	-15.852	66.205	1.00	24.54
4637	CA	GLU	A	576	-72.023	-14.479	66.623	1.00	25.07
4638	CB	GLU	A	576	-71.966	-14.362	68.156	1.00	25.09
4639	CG	GLU	A	576	-70.588	-14.803	68.647	1.00	29.60
4640	CD	GLU	A	576	-70.568	-15.249	70.066	1.00	36.00
4641	OE1	GLU	A	576	-71.647	-15.191	70.738	1.00	41.48
4642	OE2	GLU	A	576	-69.472	-15.633	70.516	1.00	35.97
4643	C	GLU	A	576	-70.981	-13.564	66.016	1.00	24.36
4644	O	GLU	A	576	-71.282	-12.440	65.643	1.00	25.27
4645	N	VAL	A	577	-69.748	-14.049	65.920	1.00	24.26
4646	CA	VAL	A	577	-68.642	-13.263	65.372	1.00	24.64
4647	CB	VAL	A	577	-67.260	-13.920	65.687	1.00	24.48
4648	CG1	VAL	A	577	-67.002	-13.974	67.197	1.00	24.21
4649	CG2	VAL	A	577	-66.137	-13.209	64.978	1.00	22.74
4650	C	VAL	A	577	-68.786	-13.106	63.855	1.00	25.55
4651	O	VAL	A	577	-68.661	-12.000	63.319	1.00	24.62
4652	N	GLU	A	578	-69.052	-14.224	63.176	1.00	26.99
4653	CA	GLU	A	578	-69.236	-14.250	61.724	1.00	28.75
4654	CB	GLU	A	578	-69.516	-15.678	61.200	1.00	29.47
4655	CG	GLU	A	578	-69.474	-15.744	59.666	1.00	35.98
4656	CD	GLU	A	578	-70.678	-16.408	59.000	1.00	41.51
4657	OE1	GLU	A	578	-70.766	-17.667	59.027	1.00	43.85
4658	OE2	GLU	A	578	-71.528	-15.667	58.415	1.00	44.47
4659	C	GLU	A	578	-70.411	-13.385	61.326	1.00	28.18
4660	O	GLU	A	578	-70.366	-12.691	60.315	1.00	29.02
4661	N	ASP	A	579	-71.475	-13.432	62.115	1.00	27.29
4662	CA	ASP	A	579	-72.657	-12.664	61.770	1.00	26.74
4663	CB	ASP	A	579	-73.872	-13.085	62.610	1.00	26.84
4664	CG	ASP	A	579	-74.373	-14.482	62.252	1.00	27.08
4665	OD1	ASP	A	579	-73.862	-15.049	61.275	1.00	27.19
4666	OD2	ASP	A	579	-75.242	-15.106	62.901	1.00	26.42
4667	C	ASP	A	579	-72.434	-11.145	61.787	1.00	26.27
4668	O	ASP	A	579	-73.064	-10.435	61.016	1.00	26.65
4669	N	GLN	A	580	-71.529	-10.640	62.628	1.00	25.40
4670	CA	GLN	A	580	-71.254	-9.199	62.621	1.00	24.43
4671	CB	GLN	A	580	-70.470	-8.754	63.860	1.00	23.63
4672	CG	GLN	A	580	-71.186	-9.012	65.177	1.00	22.96
4673	CD	GLN	A	580	-72.359	-8.089	65.398	1.00	24.48
4674	OE1	GLN	A	580	-72.244	-6.880	65.175	1.00	23.51
4675	NE2	GLN	A	580	-73.487	-8.641	65.855	1.00	23.17
4676	C	GLN	A	580	-70.503	-8.829	61.357	1.00	24.33
4677	O	GLN	A	580	-70.728	-7.786	60.794	1.00	24.44
4678	N	ILE	A	581	-69.606	-9.698	60.910	1.00	25.25
4679	CA	ILE	A	581	-68.882	-9.459	59.670	1.00	25.47
4680	CB	ILE	A	581	-67.740	-10.503	59.505	1.00	25.79
4681	CG1	ILE	A	581	-66.747	-10.358	60.655	1.00	24.36
4682	CD1	ILE	A	581	-65.898	-11.571	60.849	1.00	26.09



FIGURE 3 CN

A	B	C	D	E	F	G	H	I	J
4683	CG2	ILE	A	581	-67.018	-10.340	58.178	1.00	23.48
4684	C	ILE	A	581	-69.848	-9.479	58.495	1.00	25.99
4685	O	ILE	A	581	-69.893	-8.536	57.709	1.00	25.68
4686	N	GLU	A	582	-70.655	-10.535	58.400	1.00	26.98
4687	CA	GLU	A	582	-71.627	-10.649	57.310	1.00	27.56
4688	CB	GLU	A	582	-72.440	-11.943	57.439	1.00	27.57
4689	CG	GLU	A	582	-72.756	-12.676	56.125	1.00	32.74
4690	CD	GLU	A	582	-72.859	-11.779	54.910	1.00	36.03
4691	OE1	GLU	A	582	-72.301	-10.677	54.938	1.00	43.19
4692	OE2	GLU	A	582	-73.505	-12.152	53.922	1.00	38.32
4693	C	GLU	A	582	-72.572	-9.434	57.292	1.00	27.50
4694	O	GLU	A	582	-72.824	-8.846	56.245	1.00	27.08
4695	N	ALA	A	583	-73.095	-9.061	58.459	1.00	27.71
4696	CA	ALA	A	583	-73.996	-7.923	58.549	1.00	27.63
4697	CB	ALA	A	583	-74.547	-7.792	59.958	1.00	28.04
4698	C	ALA	A	583	-73.307	-6.633	58.108	1.00	27.53
4699	O	ALA	A	583	-73.936	-5.748	57.521	1.00	27.90
4700	N	ALA	A	584	-72.016	-6.518	58.376	1.00	27.00
4701	CA	ALA	A	584	-71.264	-5.351	57.884	1.00	27.08
4702	CB	ALA	A	584	-69.876	-5.302	58.478	1.00	26.37
4703	C	ALA	A	584	-71.172	-5.376	56.361	1.00	27.19
4704	O	ALA	A	584	-71.324	-4.340	55.709	1.00	26.53
4705	N	ARG	A	585	-70.893	-6.554	55.805	1.00	27.50
4706	CA	ARG	A	585	-70.859	-6.715	54.360	1.00	29.16
4707	CB	ARG	A	585	-70.569	-8.169	53.976	1.00	29.32
4708	CG	ARG	A	585	-69.127	-8.522	54.150	1.00	29.55
4709	CD	ARG	A	585	-68.661	-9.684	53.298	1.00	31.77
4710	NE	ARG	A	585	-68.458	-10.853	54.118	1.00	34.87
4711	CZ	ARG	A	585	-67.285	-11.288	54.515	1.00	37.82
4712	NH1	ARG	A	585	-66.172	-10.666	54.124	1.00	39.98
4713	NH2	ARG	A	585	-67.224	-12.361	55.294	1.00	38.69
4714	C	ARG	A	585	-72.216	-6.297	53.793	1.00	29.98
4715	O	ARG	A	585	-72.286	-5.577	52.788	1.00	29.89
4716	N	GLN	A	586	-73.284	-6.689	54.485	1.00	30.37
4717	CA	GLN	A	586	-74.632	-6.362	54.045	1.00	31.66
4718	CB	GLN	A	586	-75.667	-7.060	54.928	1.00	31.84
4719	CG	GLN	A	586	-76.684	-7.899	54.172	1.00	36.59
4720	CD	GLN	A	586	-76.029	-9.048	53.461	1.00	40.20
4721	OE1	GLN	A	586	-75.172	-9.713	54.039	1.00	44.36
4722	NE2	GLN	A	586	-76.386	-9.264	52.195	1.00	39.89
4723	C	GLN	A	586	-74.840	-4.854	54.080	1.00	31.69
4724	O	GLN	A	586	-75.386	-4.275	53.146	1.00	31.81
4725	N	PHE	A	587	-74.422	-4.217	55.174	1.00	31.91
4726	CA	PHE	A	587	-74.562	-2.776	55.285	1.00	31.85
4727	CB	PHE	A	587	-74.022	-2.248	56.610	1.00	31.23
4728	CG	PHE	A	587	-74.724	-2.795	57.804	1.00	30.64
4729	CD1	PHE	A	587	-76.040	-3.231	57.711	1.00	29.81
4730	CE1	PHE	A	587	-76.699	-3.757	58.824	1.00	28.57
4731	CZ	PHE	A	587	-76.038	-3.835	60.035	1.00	28.65
4732	CE2	PHE	A	587	-74.716	-3.408	60.138	1.00	28.60
4733	CD2	PHE	A	587	-74.065	-2.895	59.026	1.00	28.50

FIGURE 3 CO

A	B	C	D	E	F	G	H	I	J
4734	C	PHE	A	587	-73.799	-2.137	54.156	1.00	32.30
4735	O	PHE	A	587	-74.278	-1.195	53.544	1.00	32.07
4736	N	SER	A	588	-72.610	-2.646	53.862	1.00	33.09
4737	CA	SER	A	588	-71.858	-2.014	52.793	1.00	34.56
4738	CB	SER	A	588	-70.401	-2.484	52.698	1.00	33.97
4739	OG	SER	A	588	-70.287	-3.892	52.705	1.00	37.23
4740	C	SER	A	588	-72.625	-2.107	51.478	1.00	35.02
4741	O	SER	A	588	-72.614	-1.174	50.691	1.00	36.03
4742	N	LYS	A	589	-73.338	-3.205	51.259	1.00	35.40
4743	CA	LYS	A	589	-74.123	-3.325	50.030	1.00	35.48
4744	CB	LYS	A	589	-74.426	-4.792	49.693	1.00	35.59
4745	CG	LYS	A	589	-73.147	-5.576	49.328	1.00	36.84
4746	CD	LYS	A	589	-73.398	-6.653	48.284	1.00	38.33
4747	CE	LYS	A	589	-73.575	-8.012	48.911	1.00	39.71
4748	NZ	LYS	A	589	-75.002	-8.300	49.224	1.00	40.52
4749	C	LYS	A	589	-75.394	-2.480	50.042	1.00	35.12
4750	O	LYS	A	589	-76.239	-2.605	49.156	1.00	35.29
4751	N	MET	A	590	-75.537	-1.601	51.024	1.00	34.69
4752	CA	MET	A	590	-76.740	-0.767	51.048	1.00	33.79
4753	CB	MET	A	590	-77.262	-0.569	52.458	1.00	33.69
4754	CG	MET	A	590	-77.937	-1.755	53.037	1.00	31.72
4755	SD	MET	A	590	-78.280	-1.418	54.752	1.00	32.99
4756	CE	MET	A	590	-78.912	-3.103	55.209	1.00	29.27
4757	C	MET	A	590	-76.563	0.589	50.368	1.00	33.45
4758	O	MET	A	590	-77.516	1.365	50.296	1.00	33.67
4759	N	GLY	A	591	-75.348	0.889	49.918	1.00	32.59
4760	CA	GLY	A	591	-75.121	2.077	49.109	1.00	32.15
4761	C	GLY	A	591	-74.686	3.369	49.788	1.00	31.95
4762	O	GLY	A	591	-74.040	4.199	49.163	1.00	31.35
4763	N	PHE	A	592	-75.040	3.552	51.055	1.00	31.61
4764	CA	PHE	A	592	-74.670	4.767	51.752	1.00	31.68
4765	CB	PHE	A	592	-75.899	5.387	52.405	1.00	31.22
4766	CG	PHE	A	592	-76.687	4.424	53.230	1.00	31.65
4767	CD1	PHE	A	592	-77.873	3.889	52.750	1.00	31.62
4768	CE1	PHE	A	592	-78.608	3.008	53.518	1.00	30.54
4769	CZ	PHE	A	592	-78.142	2.636	54.752	1.00	33.03
4770	CE2	PHE	A	592	-76.941	3.148	55.237	1.00	30.57
4771	CD2	PHE	A	592	-76.232	4.032	54.486	1.00	30.78
4772	C	PHE	A	592	-73.544	4.549	52.774	1.00	31.58
4773	O	PHE	A	592	-73.324	5.367	53.667	1.00	31.89
4774	N	VAL	A	593	-72.813	3.462	52.620	1.00	31.73
4775	CA	VAL	A	593	-71.753	3.134	53.559	1.00	31.79
4776	CB	VAL	A	593	-72.012	1.740	54.213	1.00	32.37
4777	CG1	VAL	A	593	-70.799	1.260	54.986	1.00	32.98
4778	CG2	VAL	A	593	-73.242	1.798	55.119	1.00	31.20
4779	C	VAL	A	593	-70.410	3.166	52.854	1.00	31.65
4780	O	VAL	A	593	-70.260	2.579	51.800	1.00	31.88
4781	N	ASP	A	594	-69.436	3.875	53.418	1.00	31.26
4782	CA	ASP	A	594	-68.103	3.920	52.821	1.00	31.13
4783	CB	ASP	A	594	-67.373	5.178	53.268	1.00	30.73
4784	CG	ASP	A	594	-65.996	5.262	52.694	1.00	30.54

FIGURE 3 CP

A	B	C	D	E	F	G	H	I	J
4785	OD1	ASP	A	594	-65.298	6.276	52.932	1.00	31.10
4786	OD2	ASP	A	594	-65.535	4.351	51.980	1.00	29.73
4787	C	ASP	A	594	-67.268	2.680	53.188	1.00	31.66
4788	O	ASP	A	594	-66.721	2.589	54.288	1.00	31.47
4789	N	ASN	A	595	-67.157	1.742	52.256	1.00	32.31
4790	CA	ASN	A	595	-66.447	0.486	52.481	1.00	33.15
4791	CB	ASN	A	595	-66.375	-0.314	51.186	1.00	33.65
4792	CG	ASN	A	595	-67.719	-0.824	50.775	1.00	38.94
4793	OD1	ASN	A	595	-68.738	-0.408	51.346	1.00	45.03
4794	ND2	ASN	A	595	-67.757	-1.729	49.792	1.00	42.29
4795	C	ASN	A	595	-65.056	0.630	53.059	1.00	32.62
4796	O	ASN	A	595	-64.505	-0.304	53.641	1.00	32.40
4797	N	LYS	A	596	-64.484	1.805	52.897	1.00	32.33
4798	CA	LYS	A	596	-63.135	2.024	53.333	1.00	32.38
4799	CB	LYS	A	596	-62.454	3.010	52.387	1.00	33.19
4800	CG	LYS	A	596	-62.424	2.514	50.961	1.00	35.40
4801	CD	LYS	A	596	-61.092	2.823	50.317	1.00	40.22
4802	CE	LYS	A	596	-60.853	4.328	50.276	1.00	42.88
4803	NZ	LYS	A	596	-61.988	4.993	49.567	1.00	44.77
4804	C	LYS	A	596	-63.064	2.516	54.763	1.00	31.21
4805	O	LYS	A	596	-61.985	2.590	55.318	1.00	31.59
4806	N	ARG	A	597	-64.217	2.841	55.338	1.00	29.75
4807	CA	ARG	A	597	-64.313	3.364	56.695	1.00	28.43
4808	CB	ARG	A	597	-64.513	4.888	56.671	1.00	28.70
4809	CG	ARG	A	597	-63.307	5.654	56.103	1.00	28.99
4810	CD	ARG	A	597	-63.447	7.156	56.153	1.00	28.51
4811	NE	ARG	A	597	-64.579	7.588	55.339	1.00	33.03
4812	CZ	ARG	A	597	-65.195	8.752	55.473	1.00	33.59
4813	NH1	ARG	A	597	-64.780	9.614	56.396	1.00	33.72
4814	NH2	ARG	A	597	-66.222	9.061	54.680	1.00	33.44
4815	C	ARG	A	597	-65.426	2.701	57.510	1.00	27.19
4816	O	ARG	A	597	-66.436	3.319	57.861	1.00	26.73
4817	N	ILE	A	598	-65.230	1.427	57.799	1.00	25.80
4818	CA	ILE	A	598	-66.137	0.688	58.639	1.00	24.49
4819	CB	ILE	A	598	-66.617	-0.567	57.916	1.00	24.74
4820	CG1	ILE	A	598	-67.481	-0.187	56.706	1.00	24.85
4821	CD1	ILE	A	598	-67.704	-1.335	55.743	1.00	24.67
4822	CG2	ILE	A	598	-67.430	-1.444	58.857	1.00	24.93
4823	C	ILE	A	598	-65.334	0.301	59.858	1.00	23.90
4824	O	ILE	A	598	-64.272	-0.279	59.744	1.00	23.23
4825	N	ALA	A	599	-65.827	0.664	61.027	1.00	23.45
4826	CA	ALA	A	599	-65.160	0.328	62.268	1.00	22.40
4827	CB	ALA	A	599	-64.747	1.585	63.000	1.00	21.96
4828	C	ALA	A	599	-66.121	-0.500	63.113	1.00	22.02
4829	O	ALA	A	599	-67.296	-0.687	62.746	1.00	22.71
4830	N	ILE	A	600	-65.622	-0.960	64.257	1.00	20.97
4831	CA	ILE	A	600	-66.371	-1.826	65.137	1.00	20.54
4832	CB	ILE	A	600	-66.192	-3.232	64.592	1.00	20.86
4833	CG1	ILE	A	600	-67.310	-4.181	65.027	1.00	22.29
4834	CD1	ILE	A	600	-66.944	-5.045	66.119	1.00	26.19
4835	CG2	ILE	A	600	-64.791	-3.770	64.878	1.00	18.98

FIGURE 3 CQ

A	B	C	D	E	F	G	H	I	J
4836	C	ILE	A	600	-65.854	-1.658	66.568	1.00	20.20
4837	O	ILE	A	600	-64.666	-1.479	66.779	1.00	20.38
4838	N	TRP	A	601	-66.752	-1.651	67.550	1.00	19.65
4839	CA	TRP	A	601	-66.333	-1.504	68.922	1.00	19.05
4840	CB	TRP	A	601	-66.154	-0.035	69.317	1.00	19.24
4841	CG	TRP	A	601	-67.373	0.620	69.882	1.00	18.88
4842	CD1	TRP	A	601	-68.465	1.053	69.185	1.00	19.07
4843	NE1	TRP	A	601	-69.379	1.616	70.040	1.00	18.07
4844	CE2	TRP	A	601	-68.879	1.575	71.310	1.00	17.52
4845	CD2	TRP	A	601	-67.613	0.959	71.246	1.00	18.30
4846	CE3	TRP	A	601	-66.896	0.777	72.436	1.00	19.10
4847	CZ3	TRP	A	601	-67.446	1.212	73.619	1.00	17.74
4848	CH2	TRP	A	601	-68.711	1.825	73.652	1.00	18.95
4849	CZ2	TRP	A	601	-69.440	2.021	72.505	1.00	18.66
4850	C	TRP	A	601	-67.344	-2.152	69.821	1.00	18.80
4851	O	TRP	A	601	-68.487	-2.311	69.453	1.00	18.02
4852	N	GLY	A	602	-66.890	-2.500	71.018	1.00	18.67
4853	CA	GLY	A	602	-67.697	-3.197	71.990	1.00	18.53
4854	C	GLY	A	602	-67.006	-3.251	73.334	1.00	18.13
4855	O	GLY	A	602	-65.801	-3.056	73.416	1.00	17.50
4856	N	TRP	A	603	-67.800	-3.507	74.368	1.00	19.13
4857	CA	TRP	A	603	-67.376	-3.538	75.761	1.00	20.22
4858	CB	TRP	A	603	-68.257	-2.564	76.553	1.00	21.35
4859	CG	TRP	A	603	-67.685	-1.992	77.818	1.00	22.59
4860	CD1	TRP	A	603	-67.293	-2.672	78.948	1.00	23.68
4861	NE1	TRP	A	603	-66.830	-1.787	79.895	1.00	22.81
4862	CE2	TRP	A	603	-66.929	-0.511	79.392	1.00	24.43
4863	CD2	TRP	A	603	-67.460	-0.607	78.089	1.00	22.74
4864	CE3	TRP	A	603	-67.653	0.571	77.361	1.00	23.54
4865	CZ3	TRP	A	603	-67.305	1.788	77.942	1.00	22.90
4866	CH2	TRP	A	603	-66.799	1.851	79.227	1.00	22.27
4867	CZ2	TRP	A	603	-66.594	0.721	79.974	1.00	24.33
4868	C	TRP	A	603	-67.653	-4.927	76.283	1.00	20.37
4869	O	TRP	A	603	-68.703	-5.484	75.993	1.00	20.67
4870	N	SER	A	604	-66.742	-5.484	77.076	1.00	20.51
4871	CA	SER	A	604	-66.990	-6.793	77.672	1.00	20.36
4872	CB	SER	A	604	-68.219	-6.726	78.567	1.00	19.86
4873	OG	SER	A	604	-68.161	-7.730	79.566	1.00	20.74
4874	C	SER	A	604	-67.154	-7.862	76.583	1.00	20.12
4875	O	SER	A	604	-66.245	-8.073	75.784	1.00	20.16
4876	N	TYR	A	605	-68.297	-8.533	76.540	1.00	20.10
4877	CA	TYR	A	605	-68.518	-9.518	75.486	1.00	20.37
4878	CB	TYR	A	605	-69.903	-10.184	75.584	1.00	20.14
4879	CG	TYR	A	605	-69.951	-11.514	74.828	1.00	20.65
4880	CD1	TYR	A	605	-69.848	-12.733	75.497	1.00	20.20
4881	CE1	TYR	A	605	-69.875	-13.935	74.810	1.00	20.48
4882	CZ	TYR	A	605	-69.989	-13.923	73.430	1.00	22.31
4883	OH	TYR	A	605	-70.006	-15.103	72.698	1.00	19.08
4884	CE2	TYR	A	605	-70.074	-12.714	72.759	1.00	20.96
4885	CD2	TYR	A	605	-70.029	-11.537	73.447	1.00	19.30
4886	C	TYR	A	605	-68.345	-8.832	74.135	1.00	20.06

FIGURE 3 CR

A	B	C	D	E	F	G	H	I	J
4887	O	TYR	A	605	-67.813	-9.416	73.184	1.00	20.26
4888	N	GLY	A	606	-68.772	-7.576	74.063	1.00	19.47
4889	CA	GLY	A	606	-68.587	-6.807	72.859	1.00	19.08
4890	C	GLY	A	606	-67.126	-6.556	72.532	1.00	19.25
4891	O	GLY	A	606	-66.784	-6.410	71.375	1.00	19.90
4892	N	GLY	A	607	-66.263	-6.471	73.539	1.00	19.37
4893	CA	GLY	A	607	-64.846	-6.285	73.288	1.00	19.47
4894	C	GLY	A	607	-64.241	-7.557	72.736	1.00	19.64
4895	O	GLY	A	607	-63.327	-7.540	71.912	1.00	20.22
4896	N	TYR	A	608	-64.789	-8.677	73.180	1.00	19.76
4897	CA	TYR	A	608	-64.337	-9.971	72.733	1.00	19.82
4898	CB	TYR	A	608	-65.032	-11.051	73.555	1.00	20.02
4899	CG	TYR	A	608	-64.816	-12.453	73.029	1.00	19.56
4900	CD1	TYR	A	608	-65.881	-13.193	72.561	1.00	18.04
4901	CE1	TYR	A	608	-65.710	-14.481	72.069	1.00	18.41
4902	CZ	TYR	A	608	-64.480	-15.056	72.070	1.00	18.91
4903	OH	TYR	A	608	-64.386	-16.339	71.600	1.00	19.03
4904	CE2	TYR	A	608	-63.367	-14.352	72.543	1.00	18.99
4905	CD2	TYR	A	608	-63.544	-13.043	73.026	1.00	19.02
4906	C	TYR	A	608	-64.647	-10.165	71.268	1.00	19.33
4907	O	TYR	A	608	-63.785	-10.541	70.481	1.00	19.69
4908	N	VAL	A	609	-65.884	-9.891	70.899	1.00	19.79
4909	CA	VAL	A	609	-66.332	-10.058	69.509	1.00	19.80
4910	CB	VAL	A	609	-67.851	-9.966	69.441	1.00	19.50
4911	CG1	VAL	A	609	-68.363	-9.936	67.988	1.00	17.59
4912	CG2	VAL	A	609	-68.423	-11.129	70.204	1.00	18.52
4913	C	VAL	A	609	-65.681	-9.042	68.601	1.00	20.82
4914	O	VAL	A	609	-65.329	-9.340	67.455	1.00	21.36
4915	N	THR	A	610	-65.480	-7.837	69.121	1.00	20.90
4916	CA	THR	A	610	-64.789	-6.816	68.351	1.00	20.87
4917	CB	THR	A	610	-64.740	-5.495	69.167	1.00	20.91
4918	OG1	THR	A	610	-65.965	-4.785	68.971	1.00	22.30
4919	CG2	THR	A	610	-63.707	-4.544	68.630	1.00	21.50
4920	C	THR	A	610	-63.394	-7.313	68.007	1.00	20.98
4921	O	THR	A	610	-62.941	-7.194	66.860	1.00	22.27
4922	N	SER	A	611	-62.709	-7.876	68.996	1.00	20.87
4923	CA	SER	A	611	-61.348	-8.392	68.812	1.00	20.57
4924	CB	SER	A	611	-60.729	-8.720	70.176	1.00	20.33
4925	OG	SER	A	611	-60.765	-7.600	71.046	1.00	20.22
4926	C	SER	A	611	-61.326	-9.649	67.927	1.00	20.65
4927	O	SER	A	611	-60.479	-9.803	67.049	1.00	20.83
4928	N	MET	A	612	-62.238	-10.568	68.197	1.00	20.77
4929	CA	MET	A	612	-62.367	-11.751	67.370	1.00	21.12
4930	CB	MET	A	612	-63.511	-12.606	67.889	1.00	20.97
4931	CG	MET	A	612	-63.193	-13.164	69.283	1.00	21.19
4932	SD	MET	A	612	-61.798	-14.330	69.207	1.00	23.15
4933	CE	MET	A	612	-62.568	-15.751	68.577	1.00	22.70
4934	C	MET	A	612	-62.618	-11.310	65.931	1.00	21.34
4935	O	MET	A	612	-61.983	-11.787	64.992	1.00	20.82
4936	N	VAL	A	613	-63.527	-10.364	65.764	1.00	21.34
4937	CA	VAL	A	613	-63.797	-9.841	64.439	1.00	21.73

FIGURE 3 CS

A	B	C	D	E	F	G	H	I	J
4938	CB	VAL	A	613	-64.908	-8.765	64.483	1.00	22.08
4939	CG1	VAL	A	613	-64.827	-7.843	63.272	1.00	20.14
4940	CG2	VAL	A	613	-66.283	-9.398	64.590	1.00	20.64
4941	C	VAL	A	613	-62.541	-9.189	63.833	1.00	22.48
4942	O	VAL	A	613	-62.172	-9.483	62.709	1.00	23.29
4943	N	LEU	A	614	-61.910	-8.262	64.559	1.00	22.81
4944	CA	LEU	A	614	-60.700	-7.582	64.071	1.00	22.75
4945	CB	LEU	A	614	-60.168	-6.632	65.127	1.00	22.12
4946	CG	LEU	A	614	-60.839	-5.259	65.192	1.00	22.33
4947	CD1	LEU	A	614	-60.855	-4.586	63.827	1.00	20.46
4948	CD2	LEU	A	614	-60.135	-4.379	66.227	1.00	19.62
4949	C	LEU	A	614	-59.576	-8.562	63.696	1.00	23.50
4950	O	LEU	A	614	-58.803	-8.318	62.767	1.00	22.74
4951	N	GLY	A	615	-59.469	-9.679	64.411	1.00	24.16
4952	CA	GLY	A	615	-58.389	-10.598	64.125	1.00	24.56
4953	C	GLY	A	615	-58.811	-11.723	63.204	1.00	25.13
4954	O	GLY	A	615	-58.144	-12.750	63.121	1.00	25.78
4955	N	SER	A	616	-59.914	-11.516	62.493	1.00	24.85
4956	CA	SER	A	616	-60.465	-12.555	61.625	1.00	25.43
4957	CB	SER	A	616	-61.980	-12.439	61.552	1.00	24.54
4958	OG	SER	A	616	-62.338	-11.405	60.653	1.00	25.35
4959	C	SER	A	616	-59.914	-12.534	60.201	1.00	26.05
4960	O	SER	A	616	-60.066	-13.505	59.475	1.00	26.76
4961	N	GLY	A	617	-59.319	-11.418	59.790	1.00	26.16
4962	CA	GLY	A	617	-58.770	-11.308	58.458	1.00	26.91
4963	C	GLY	A	617	-59.816	-11.051	57.390	1.00	27.84
4964	O	GLY	A	617	-59.518	-11.116	56.198	1.00	28.65
4965	N	SER	A	618	-61.041	-10.746	57.806	1.00	27.72
4966	CA	SER	A	618	-62.104	-10.495	56.854	1.00	27.42
4967	CB	SER	A	618	-63.412	-10.148	57.573	1.00	27.27
4968	OG	SER	A	618	-63.443	-8.776	57.938	1.00	26.02
4969	C	SER	A	618	-61.745	-9.365	55.905	1.00	27.44
4970	O	SER	A	618	-62.182	-9.359	54.775	1.00	28.42
4971	N	GLY	A	619	-60.958	-8.402	56.368	1.00	27.41
4972	CA	GLY	A	619	-60.626	-7.237	55.561	1.00	26.48
4973	C	GLY	A	619	-61.742	-6.213	55.513	1.00	25.98
4974	O	GLY	A	619	-61.645	-5.190	54.857	1.00	26.95
4975	N	VAL	A	620	-62.814	-6.471	56.237	1.00	25.53
4976	CA	VAL	A	620	-63.963	-5.596	56.199	1.00	24.51
4977	CB	VAL	A	620	-65.201	-6.328	56.718	1.00	24.57
4978	CG1	VAL	A	620	-66.337	-5.339	56.992	1.00	26.07
4979	CG2	VAL	A	620	-65.661	-7.401	55.700	1.00	23.73
4980	C	VAL	A	620	-63.745	-4.355	57.033	1.00	24.42
4981	O	VAL	A	620	-64.141	-3.242	56.652	1.00	24.86
4982	N	PHE	A	621	-63.075	-4.535	58.159	1.00	23.10
4983	CA	PHE	A	621	-62.945	-3.473	59.115	1.00	23.04
4984	CB	PHE	A	621	-63.239	-4.007	60.528	1.00	22.40
4985	CG	PHE	A	621	-64.635	-4.567	60.673	1.00	22.15
4986	CD1	PHE	A	621	-64.936	-5.855	60.234	1.00	21.19
4987	CE1	PHE	A	621	-66.213	-6.367	60.360	1.00	19.39
4988	CZ	PHE	A	621	-67.210	-5.607	60.905	1.00	18.20

FIGURE 3 CT

A	B	C	D	E	F	G	H	I	J
4989	CE2	PHE	A	621	-66.930	-4.325	61.341	1.00	21.85
4990	CD2	PHE	A	621	-65.646	-3.810	61.220	1.00	20.24
4991	C	PHE	A	621	-61.605	-2.790	59.038	1.00	23.53
4992	O	PHE	A	621	-60.574	-3.434	58.902	1.00	23.71
4993	N	LYS	A	622	-61.625	-1.468	59.122	1.00	23.65
4994	CA	LYS	A	622	-60.373	-0.731	59.100	1.00	23.95
4995	CB	LYS	A	622	-60.603	0.675	58.550	1.00	23.87
4996	CG	LYS	A	622	-59.352	1.521	58.470	1.00	22.68
4997	CD	LYS	A	622	-59.710	2.933	57.967	1.00	24.66
4998	CE	LYS	A	622	-58.478	3.655	57.412	1.00	23.86
4999	NZ	LYS	A	622	-57.624	4.200	58.507	1.00	28.09
5000	C	LYS	A	622	-59.781	-0.632	60.505	1.00	23.70
5001	O	LYS	A	622	-58.566	-0.661	60.684	1.00	23.21
5002	N	CYS	A	623	-60.645	-0.501	61.495	1.00	23.54
5003	CA	CYS	A	623	-60.166	-0.293	62.857	1.00	24.57
5004	CB	CYS	A	623	-59.860	1.182	63.083	1.00	24.69
5005	SG	CYS	A	623	-61.320	2.194	62.772	1.00	30.15
5006	C	CYS	A	623	-61.243	-0.698	63.840	1.00	23.59
5007	O	CYS	A	623	-62.403	-0.866	63.466	1.00	23.61
5008	N	GLY	A	624	-60.862	-0.871	65.099	1.00	22.96
5009	CA	GLY	A	624	-61.840	-1.187	66.120	1.00	21.96
5010	C	GLY	A	624	-61.314	-0.848	67.495	1.00	20.56
5011	O	GLY	A	624	-60.132	-0.635	67.653	1.00	20.22
5012	N	ILE	A	625	-62.209	-0.813	68.475	1.00	19.69
5013	CA	ILE	A	625	-61.873	-0.530	69.852	1.00	18.81
5014	CB	ILE	A	625	-62.539	0.816	70.289	1.00	19.01
5015	CG1	ILE	A	625	-62.211	1.945	69.321	1.00	16.11
5016	CD1	ILE	A	625	-62.914	3.197	69.682	1.00	16.02
5017	CG2	ILE	A	625	-62.188	1.161	71.746	1.00	17.25
5018	C	ILE	A	625	-62.497	-1.616	70.714	1.00	18.34
5019	O	ILE	A	625	-63.681	-1.858	70.592	1.00	18.65
5020	N	ALA	A	626	-61.729	-2.222	71.610	1.00	17.80
5021	CA	ALA	A	626	-62.288	-3.197	72.543	1.00	17.73
5022	CB	ALA	A	626	-61.597	-4.520	72.443	1.00	17.61
5023	C	ALA	A	626	-62.125	-2.654	73.937	1.00	17.44
5024	O	ALA	A	626	-61.050	-2.290	74.309	1.00	17.61
5025	N	VAL	A	627	-63.204	-2.613	74.703	1.00	17.74
5026	CA	VAL	A	627	-63.141	-2.142	76.066	1.00	17.94
5027	CB	VAL	A	627	-64.189	-1.037	76.336	1.00	18.00
5028	CG1	VAL	A	627	-64.074	-0.544	77.788	1.00	16.19
5029	CG2	VAL	A	627	-63.990	0.113	75.368	1.00	16.44
5030	C	VAL	A	627	-63.416	-3.319	76.992	1.00	18.36
5031	O	VAL	A	627	-64.425	-3.988	76.833	1.00	19.01
5032	N	ALA	A	628	-62.528	-3.539	77.963	1.00	17.77
5033	CA	ALA	A	628	-62.620	-4.654	78.907	1.00	17.24
5034	CB	ALA	A	628	-63.491	-4.281	80.065	1.00	17.08
5035	C	ALA	A	628	-63.065	-5.997	78.288	1.00	17.61
5036	O	ALA	A	628	-63.979	-6.666	78.806	1.00	17.63
5037	N	PRO	A	629	-62.396	-6.409	77.213	1.00	17.78
5038	CA	PRO	A	629	-62.741	-7.655	76.511	1.00	18.00
5039	CB	PRO	A	629	-61.836	-7.606	75.267	1.00	17.83

FIGURE 3 CU

A	B	C	D	E	F	G	H	I	J
5040	CG	PRO	A	629	-60.617	-6.764	75.745	1.00	18.80
5041	CD	PRO	A	629	-61.279	-5.681	76.557	1.00	18.05
5042	C	PRO	A	629	-62.392	-8.941	77.243	1.00	18.89
5043	O	PRO	A	629	-61.370	-9.040	77.919	1.00	19.33
5044	N	VAL	A	630	-63.226	-9.952	77.076	1.00	19.22
5045	CA	VAL	A	630	-62.841	-11.281	77.480	1.00	19.56
5046	CB	VAL	A	630	-64.083	-12.211	77.510	1.00	19.47
5047	CG1	VAL	A	630	-63.676	-13.691	77.445	1.00	19.05
5048	CG2	VAL	A	630	-64.900	-11.946	78.783	1.00	20.10
5049	C	VAL	A	630	-61.865	-11.663	76.369	1.00	20.33
5050	O	VAL	A	630	-62.067	-11.286	75.214	1.00	20.14
5051	N	SER	A	631	-60.775	-12.350	76.682	1.00	21.22
5052	CA	SER	A	631	-59.829	-12.710	75.615	1.00	20.43
5053	CB	SER	A	631	-58.464	-12.108	75.876	1.00	20.42
5054	OG	SER	A	631	-57.862	-12.676	77.020	1.00	18.57
5055	C	SER	A	631	-59.726	-14.227	75.476	1.00	21.06
5056	O	SER	A	631	-59.361	-14.750	74.420	1.00	20.72
5057	N	ARG	A	632	-59.999	-14.934	76.565	1.00	20.45
5058	CA	ARG	A	632	-60.150	-16.371	76.465	1.00	21.36
5059	CB	ARG	A	632	-58.829	-17.156	76.390	1.00	22.35
5060	CG	ARG	A	632	-58.075	-17.244	77.640	1.00	24.12
5061	CD	ARG	A	632	-57.443	-18.589	77.891	1.00	30.00
5062	NE	ARG	A	632	-56.637	-19.084	76.792	1.00	33.24
5063	CZ	ARG	A	632	-55.772	-20.100	76.890	1.00	34.46
5064	NH1	ARG	A	632	-55.082	-20.470	75.814	1.00	31.79
5065	NH2	ARG	A	632	-55.584	-20.728	78.063	1.00	33.30
5066	C	ARG	A	632	-61.047	-16.823	77.580	1.00	20.38
5067	O	ARG	A	632	-60.965	-16.333	78.714	1.00	20.35
5068	N	TRP	A	633	-61.905	-17.759	77.235	1.00	19.02
5069	CA	TRP	A	633	-62.980	-18.174	78.109	1.00	19.38
5070	CB	TRP	A	633	-63.983	-19.028	77.300	1.00	19.10
5071	CG	TRP	A	633	-64.675	-18.118	76.375	1.00	18.44
5072	CD1	TRP	A	633	-64.589	-18.087	75.002	1.00	16.62
5073	NE1	TRP	A	633	-65.343	-17.046	74.512	1.00	18.58
5074	CE2	TRP	A	633	-65.911	-16.369	75.565	1.00	17.12
5075	CD2	TRP	A	633	-65.503	-17.013	76.751	1.00	17.08
5076	CE3	TRP	A	633	-65.964	-16.515	77.978	1.00	15.56
5077	CZ3	TRP	A	633	-66.798	-15.409	77.981	1.00	17.56
5078	CH2	TRP	A	633	-67.182	-14.793	76.790	1.00	18.04
5079	CZ2	TRP	A	633	-66.741	-15.258	75.569	1.00	17.98
5080	C	TRP	A	633	-62.545	-18.770	79.450	1.00	20.13
5081	O	TRP	A	633	-63.253	-18.613	80.431	1.00	21.01
5082	N	GLU	A	634	-61.352	-19.353	79.527	1.00	20.46
5083	CA	GLU	A	634	-60.849	-19.887	80.802	1.00	21.33
5084	CB	GLU	A	634	-59.596	-20.758	80.564	1.00	21.47
5085	CG	GLU	A	634	-59.904	-22.204	80.183	1.00	23.57
5086	CD	GLU	A	634	-58.822	-22.837	79.320	1.00	27.27
5087	OE1	GLU	A	634	-58.809	-22.583	78.094	1.00	28.36
5088	OE2	GLU	A	634	-57.985	-23.598	79.860	1.00	30.14
5089	C	GLU	A	634	-60.526	-18.779	81.829	1.00	21.53
5090	O	GLU	A	634	-60.366	-19.037	83.021	1.00	20.99



FIGURE 3 CV

A	B	C	D	E	F	G	H	I	J
5091	N	TYR	A	635	-60.419	-17.542	81.364	1.00	22.11
5092	CA	TYR	A	635	-60.123	-16.417	82.257	1.00	21.19
5093	CB	TYR	A	635	-59.517	-15.251	81.478	1.00	20.79
5094	CG	TYR	A	635	-58.133	-15.492	80.919	1.00	21.12
5095	CD1	TYR	A	635	-57.333	-16.509	81.406	1.00	20.15
5096	CE1	TYR	A	635	-56.071	-16.727	80.897	1.00	20.96
5097	CZ	TYR	A	635	-55.582	-15.910	79.895	1.00	21.25
5098	OH	TYR	A	635	-54.311	-16.139	79.382	1.00	21.05
5099	CE2	TYR	A	635	-56.357	-14.884	79.400	1.00	19.15
5100	CD2	TYR	A	635	-57.622	-14.683	79.906	1.00	21.12
5101	C	TYR	A	635	-61.397	-15.929	82.864	1.00	21.28
5102	O	TYR	A	635	-61.393	-15.214	83.879	1.00	22.46
5103	N	TYR	A	636	-62.514	-16.299	82.267	1.00	21.33
5104	CA	TYR	A	636	-63.761	-15.712	82.736	1.00	21.39
5105	CB	TYR	A	636	-64.659	-15.289	81.570	1.00	20.83
5106	CG	TYR	A	636	-65.723	-14.318	82.011	1.00	20.13
5107	CD1	TYR	A	636	-65.380	-13.145	82.657	1.00	20.12
5108	CE1	TYR	A	636	-66.347	-12.264	83.101	1.00	21.74
5109	CZ	TYR	A	636	-67.679	-12.553	82.900	1.00	22.24
5110	OH	TYR	A	636	-68.639	-11.678	83.346	1.00	22.21
5111	CE2	TYR	A	636	-68.049	-13.727	82.274	1.00	20.77
5112	CD2	TYR	A	636	-67.067	-14.604	81.839	1.00	21.02
5113	C	TYR	A	636	-64.475	-16.571	83.786	1.00	22.12
5114	O	TYR	A	636	-64.080	-17.732	84.031	1.00	22.47
5115	N	ASP	A	637	-65.493	-16.015	84.440	1.00	21.83
5116	CA	ASP	A	637	-66.088	-16.761	85.542	1.00	22.58
5117	CB	ASP	A	637	-66.937	-15.866	86.464	1.00	22.18
5118	CG	ASP	A	637	-68.218	-15.407	85.826	1.00	22.98
5119	OD1	ASP	A	637	-69.139	-16.233	85.659	1.00	22.99
5120	OD2	ASP	A	637	-68.426	-14.222	85.505	1.00	24.25
5121	C	ASP	A	637	-66.833	-18.031	85.108	1.00	22.89
5122	O	ASP	A	637	-67.375	-18.135	84.001	1.00	22.92
5123	N	SER	A	638	-66.876	-18.990	86.019	1.00	23.10
5124	CA	SER	A	638	-67.415	-20.308	85.718	1.00	23.30
5125	CB	SER	A	638	-67.152	-21.254	86.906	1.00	23.90
5126	OG	SER	A	638	-67.823	-20.801	88.071	1.00	23.09
5127	C	SER	A	638	-68.881	-20.339	85.373	1.00	23.53
5128	O	SER	A	638	-69.261	-21.000	84.421	1.00	24.64
5129	N	VAL	A	639	-69.734	-19.648	86.118	1.00	23.29
5130	CA	VAL	A	639	-71.145	-19.850	85.835	1.00	23.29
5131	CB	VAL	A	639	-72.089	-19.592	87.067	1.00	24.01
5132	CG1	VAL	A	639	-73.131	-18.523	86.842	1.00	22.27
5133	CG2	VAL	A	639	-71.293	-19.459	88.367	1.00	23.50
5134	C	VAL	A	639	-71.607	-19.215	84.543	1.00	23.93
5135	O	VAL	A	639	-72.505	-19.725	83.879	1.00	23.23
5136	N	TYR	A	640	-70.977	-18.108	84.162	1.00	23.68
5137	CA	TYR	A	640	-71.356	-17.513	82.911	1.00	23.15
5138	CB	TYR	A	640	-70.840	-16.083	82.815	1.00	22.59
5139	CG	TYR	A	640	-71.203	-15.375	81.518	1.00	21.34
5140	CD1	TYR	A	640	-72.327	-14.557	81.450	1.00	18.73
5141	CE1	TYR	A	640	-72.659	-13.891	80.285	1.00	19.07

FIGURE 3 CW

A	B	C	D	E	F	G	H	I	J
5142	CZ	TYR	A	640	-71.859	-14.044	79.158	1.00	18.83
5143	OH	TYR	A	640	-72.182	-13.367	78.016	1.00	20.13
5144	CE2	TYR	A	640	-70.751	-14.853	79.181	1.00	18.02
5145	CD2	TYR	A	640	-70.416	-15.521	80.363	1.00	18.53
5146	C	TYR	A	640	-70.772	-18.361	81.788	1.00	23.14
5147	O	TYR	A	640	-71.481	-18.811	80.905	1.00	22.95
5148	N	THR	A	641	-69.461	-18.553	81.839	1.00	23.13
5149	CA	THR	A	641	-68.728	-19.262	80.805	1.00	22.36
5150	CB	THR	A	641	-67.247	-19.284	81.186	1.00	22.36
5151	OG1	THR	A	641	-66.793	-17.930	81.327	1.00	21.49
5152	CG2	THR	A	641	-66.390	-19.870	80.050	1.00	19.59
5153	C	THR	A	641	-69.206	-20.683	80.551	1.00	23.09
5154	O	THR	A	641	-69.448	-21.063	79.406	1.00	22.58
5155	N	GLU	A	642	-69.318	-21.476	81.614	1.00	23.11
5156	CA	GLU	A	642	-69.665	-22.884	81.449	1.00	23.47
5157	CB	GLU	A	642	-69.489	-23.619	82.775	1.00	23.64
5158	CG	GLU	A	642	-68.054	-23.600	83.260	1.00	21.61
5159	CD	GLU	A	642	-67.941	-24.019	84.701	1.00	23.47
5160	OE1	GLU	A	642	-68.965	-24.442	85.266	1.00	24.23
5161	OE2	GLU	A	642	-66.830	-23.920	85.270	1.00	24.27
5162	C	GLU	A	642	-71.061	-23.055	80.905	1.00	23.51
5163	O	GLU	A	642	-71.372	-24.027	80.202	1.00	24.20
5164	N	ARG	A	643	-71.909	-22.098	81.232	1.00	23.66
5165	CA	ARG	A	643	-73.260	-22.067	80.718	1.00	23.80
5166	CB	ARG	A	643	-73.905	-20.732	81.047	1.00	23.72
5167	CG	ARG	A	643	-75.391	-20.698	80.758	1.00	23.14
5168	CD	ARG	A	643	-76.036	-19.365	81.033	1.00	25.73
5169	NE	ARG	A	643	-75.932	-18.954	82.436	1.00	24.82
5170	CZ	ARG	A	643	-75.662	-17.718	82.842	1.00	22.95
5171	NH1	ARG	A	643	-75.437	-16.746	81.978	1.00	20.65
5172	NH2	ARG	A	643	-75.612	-17.454	84.131	1.00	24.06
5173	C	ARG	A	643	-73.305	-22.232	79.205	1.00	23.97
5174	O	ARG	A	643	-74.177	-22.902	78.674	1.00	24.18
5175	N	TYR	A	644	-72.391	-21.572	78.513	1.00	24.34
5176	CA	TYR	A	644	-72.379	-21.611	77.065	1.00	24.78
5177	CB	TYR	A	644	-72.177	-20.194	76.505	1.00	24.45
5178	CG	TYR	A	644	-73.057	-19.193	77.190	1.00	23.62
5179	CD1	TYR	A	644	-74.429	-19.230	77.035	1.00	23.88
5180	CE1	TYR	A	644	-75.231	-18.332	77.684	1.00	24.08
5181	CZ	TYR	A	644	-74.651	-17.399	78.527	1.00	24.09
5182	OH	TYR	A	644	-75.414	-16.507	79.204	1.00	23.00
5183	CE2	TYR	A	644	-73.302	-17.357	78.705	1.00	23.96
5184	CD2	TYR	A	644	-72.515	-18.255	78.047	1.00	24.31
5185	C	TYR	A	644	-71.260	-22.499	76.555	1.00	24.67
5186	O	TYR	A	644	-71.304	-22.959	75.429	1.00	24.91
5187	N	MET	A	645	-70.276	-22.764	77.393	1.00	24.31
5188	CA	MET	A	645	-69.072	-23.402	76.898	1.00	25.36
5189	CB	MET	A	645	-67.863	-22.477	77.129	1.00	25.32
5190	CG	MET	A	645	-67.842	-21.234	76.231	1.00	26.08
5191	SD	MET	A	645	-67.399	-21.710	74.533	1.00	29.71
5192	CE	MET	A	645	-65.606	-22.145	74.848	1.00	26.46

FIGURE 3 CX

A	B	C	D	E	F	G	H	I	J
5193	C	MET	A	645	-68.769	-24.767	77.478	1.00	25.69
5194	O	MET	A	645	-67.845	-25.421	77.017	1.00	25.66
5195	N	GLY	A	646	-69.525	-25.189	78.486	1.00	26.08
5196	CA	GLY	A	646	-69.240	-26.447	79.143	1.00	27.31
5197	C	GLY	A	646	-67.941	-26.242	79.871	1.00	28.29
5198	O	GLY	A	646	-67.491	-25.105	80.023	1.00	29.19
5199	N	LEU	A	647	-67.324	-27.327	80.308	1.00	29.08
5200	CA	LEU	A	647	-66.032	-27.261	80.998	1.00	29.38
5201	CB	LEU	A	647	-65.865	-28.482	81.901	1.00	29.39
5202	CG	LEU	A	647	-66.459	-28.411	83.288	1.00	31.66
5203	CD1	LEU	A	647	-67.215	-27.097	83.510	1.00	31.73
5204	CD2	LEU	A	647	-67.322	-29.637	83.525	1.00	32.56
5205	C	LEU	A	647	-64.883	-27.323	80.036	1.00	29.07
5206	O	LEU	A	647	-64.983	-27.965	79.000	1.00	28.84
5207	N	PRO	A	648	-63.759	-26.734	80.429	1.00	28.93
5208	CA	PRO	A	648	-62.536	-26.787	79.629	1.00	29.00
5209	CB	PRO	A	648	-61.746	-25.562	80.107	1.00	28.58
5210	CG	PRO	A	648	-62.450	-25.070	81.350	1.00	28.32
5211	CD	PRO	A	648	-63.574	-25.987	81.683	1.00	28.10
5212	C	PRO	A	648	-61.694	-28.026	79.932	1.00	29.46
5213	O	PRO	A	648	-60.558	-27.881	80.357	1.00	29.04
5214	N	THR	A	649	-62.235	-29.217	79.732	1.00	30.75
5215	CA	THR	A	649	-61.468	-30.441	79.940	1.00	31.30
5216	CB	THR	A	649	-62.152	-31.321	80.963	1.00	31.86
5217	CG1	THR	A	649	-63.534	-31.470	80.599	1.00	31.50
5218	CG2	THR	A	649	-62.168	-30.636	82.359	1.00	30.73
5219	C	THR	A	649	-61.406	-31.192	78.637	1.00	32.53
5220	O	THR	A	649	-62.262	-30.995	77.768	1.00	31.95
5221	N	PRO	A	650	-60.396	-32.053	78.496	1.00	33.40
5222	CA	PRO	A	650	-60.216	-32.849	77.284	1.00	33.88
5223	CB	PRO	A	650	-59.140	-33.846	77.699	1.00	33.91
5224	CG	PRO	A	650	-58.350	-33.098	78.655	1.00	33.82
5225	CD	PRO	A	650	-59.337	-32.327	79.480	1.00	33.44
5226	C	PRO	A	650	-61.479	-33.573	76.908	1.00	34.49
5227	O	PRO	A	650	-61.748	-33.726	75.715	1.00	35.35
5228	N	GLU	A	651	-62.258	-33.996	77.899	1.00	35.30
5229	CA	GLU	A	651	-63.494	-34.729	77.628	1.00	36.20
5230	CB	GLU	A	651	-63.778	-35.767	78.720	1.00	36.74
5231	CG	GLU	A	651	-63.521	-35.287	80.136	1.00	39.79
5232	CD	GLU	A	651	-62.090	-35.514	80.572	1.00	42.71
5233	OE1	GLU	A	651	-61.517	-34.626	81.245	1.00	44.21
5234	OE2	GLU	A	651	-61.537	-36.586	80.237	1.00	44.81
5235	C	GLU	A	651	-64.723	-33.845	77.424	1.00	35.94
5236	O	GLU	A	651	-65.777	-34.311	76.948	1.00	36.46
5237	N	ASP	A	652	-64.645	-32.577	77.800	1.00	34.99
5238	CA	ASP	A	652	-65.807	-31.756	77.496	1.00	33.48
5239	CB	ASP	A	652	-66.374	-30.988	78.691	1.00	33.35
5240	CG	ASP	A	652	-67.736	-30.388	78.377	1.00	33.12
5241	OD1	ASP	A	652	-68.406	-29.842	79.273	1.00	34.89
5242	OD2	ASP	A	652	-68.230	-30.430	77.238	1.00	32.30
5243	C	ASP	A	652	-65.584	-30.861	76.302	1.00	32.82

FIGURE 3 CY

A	B	C	D	E	F	G	H	I	J
5244	O	ASP	A	652	-65.827	-31.294	75.177	1.00	32.95
5245	N	ASN	A	653	-65.098	-29.634	76.527	1.00	31.69
5246	CA	ASN	A	653	-65.034	-28.649	75.448	1.00	30.86
5247	CB	ASN	A	653	-66.223	-27.682	75.585	1.00	30.19
5248	CG	ASN	A	653	-66.639	-27.043	74.251	1.00	28.23
5249	OD1	ASN	A	653	-66.427	-27.619	73.190	1.00	25.84
5250	ND2	ASN	A	653	-67.217	-25.839	74.312	1.00	24.02
5251	C	ASN	A	653	-63.709	-27.892	75.323	1.00	31.44
5252	O	ASN	A	653	-63.656	-26.819	74.711	1.00	32.23
5253	N	LEU	A	654	-62.644	-28.462	75.881	1.00	31.17
5254	CA	LEU	A	654	-61.321	-27.852	75.884	1.00	31.62
5255	CB	LEU	A	654	-60.271	-28.822	76.462	1.00	31.66
5256	CG	LEU	A	654	-58.828	-28.289	76.455	1.00	31.74
5257	CD1	LEU	A	654	-57.841	-29.275	77.064	1.00	30.38
5258	CD2	LEU	A	654	-58.739	-26.954	77.219	1.00	32.35
5259	C	LEU	A	654	-60.871	-27.367	74.515	1.00	31.37
5260	O	LEU	A	654	-60.409	-26.246	74.365	1.00	31.55
5261	N	ASP	A	655	-60.982	-28.223	73.515	1.00	31.42
5262	CA	ASP	A	655	-60.583	-27.836	72.175	1.00	31.41
5263	CB	ASP	A	655	-60.917	-28.930	71.141	1.00	31.61
5264	CG	ASP	A	655	-60.034	-30.181	71.290	1.00	33.09
5265	OD1	ASP	A	655	-58.976	-30.116	71.981	1.00	32.53
5266	OD2	ASP	A	655	-60.336	-31.282	70.762	1.00	35.23
5267	C	ASP	A	655	-61.210	-26.489	71.789	1.00	30.88
5268	O	ASP	A	655	-60.506	-25.592	71.318	1.00	31.25
5269	N	HIS	A	656	-62.506	-26.316	72.001	1.00	29.59
5270	CA	HIS	A	656	-63.091	-25.032	71.617	1.00	29.45
5271	CB	HIS	A	656	-64.605	-25.059	71.449	1.00	28.85
5272	CG	HIS	A	656	-65.125	-23.786	70.859	1.00	31.28
5273	ND1	HIS	A	656	-64.712	-23.322	69.624	1.00	31.33
5274	CE1	HIS	A	656	-65.277	-22.155	69.383	1.00	28.62
5275	NE2	HIS	A	656	-66.031	-21.836	70.419	1.00	29.04
5276	CD2	HIS	A	656	-65.936	-22.827	71.367	1.00	30.35
5277	C	HIS	A	656	-62.658	-23.841	72.496	1.00	28.95
5278	O	HIS	A	656	-62.541	-22.720	72.004	1.00	29.11
5279	N	TYR	A	657	-62.403	-24.075	73.778	1.00	28.25
5280	CA	TYR	A	657	-61.906	-23.001	74.630	1.00	27.73
5281	CB	TYR	A	657	-61.625	-23.496	76.052	1.00	27.06
5282	CG	TYR	A	657	-62.764	-23.445	77.047	1.00	24.81
5283	CD1	TYR	A	657	-62.891	-22.382	77.930	1.00	21.97
5284	CE1	TYR	A	657	-63.895	-22.348	78.863	1.00	19.46
5285	CZ	TYR	A	657	-64.801	-23.375	78.946	1.00	19.96
5286	OH	TYR	A	657	-65.821	-23.322	79.891	1.00	16.13
5287	CE2	TYR	A	657	-64.700	-24.449	78.088	1.00	20.07
5288	CD2	TYR	A	657	-63.675	-24.480	77.149	1.00	24.04
5289	C	TYR	A	657	-60.595	-22.545	74.056	1.00	28.50
5290	O	TYR	A	657	-60.312	-21.344	73.975	1.00	29.14
5291	N	ARG	A	658	-59.771	-23.505	73.658	1.00	29.19
5292	CA	ARG	A	658	-58.437	-23.163	73.181	1.00	30.10
5293	CB	ARG	A	658	-57.508	-24.378	73.186	1.00	30.86
5294	CG	ARG	A	658	-57.024	-24.776	74.559	1.00	34.28

FIGURE 3 CZ

A	B	C	D	E	F	G	H	I	J
5295	CD	ARG	A	658	-55.835	-25.746	74.525	1.00	43.28
5296	NE	ARG	A	658	-56.163	-27.019	73.882	1.00	46.55
5297	CZ	ARG	A	658	-55.464	-28.133	74.076	1.00	49.48
5298	NH1	ARG	A	658	-54.409	-28.111	74.882	1.00	50.32
5299	NH2	ARG	A	658	-55.815	-29.263	73.476	1.00	49.35
5300	C	ARG	A	658	-58.464	-22.560	71.813	1.00	29.69
5301	O	ARG	A	658	-57.530	-21.890	71.418	1.00	30.15
5302	N	ASN	A	659	-59.553	-22.769	71.099	1.00	29.67
5303	CA	ASN	A	659	-59.633	-22.288	69.745	1.00	30.12
5304	CB	ASN	A	659	-60.348	-23.342	68.894	1.00	31.51
5305	CG	ASN	A	659	-59.577	-23.688	67.669	1.00	35.72
5306	OD1	ASN	A	659	-58.687	-24.537	67.721	1.00	39.51
5307	ND2	ASN	A	659	-59.876	-23.008	66.551	1.00	38.70
5308	C	ASN	A	659	-60.382	-20.972	69.594	1.00	28.84
5309	O	ASN	A	659	-60.415	-20.416	68.506	1.00	28.71
5310	N	SER	A	660	-61.018	-20.503	70.664	1.00	27.17
5311	CA	SER	A	660	-61.844	-19.298	70.588	1.00	25.44
5312	CB	SER	A	660	-63.198	-19.580	71.215	1.00	24.98
5313	OG	SER	A	660	-63.031	-20.172	72.497	1.00	25.82
5314	C	SER	A	660	-61.221	-18.076	71.274	1.00	24.97
5315	O	SER	A	660	-61.933	-17.153	71.656	1.00	25.56
5316	N	THR	A	661	-59.908	-18.068	71.442	1.00	23.39
5317	CA	THR	A	661	-59.247	-16.941	72.075	1.00	23.16
5318	CB	THR	A	661	-57.918	-17.385	72.698	1.00	23.16
5319	OG1	THR	A	661	-56.957	-17.511	71.654	1.00	23.43
5320	CG2	THR	A	661	-57.998	-18.785	73.324	1.00	21.93
5321	C	THR	A	661	-58.889	-15.813	71.113	1.00	22.62
5322	O	THR	A	661	-58.680	-16.036	69.913	1.00	22.28
5323	N	VAL	A	662	-58.754	-14.595	71.624	1.00	22.12
5324	CA	VAL	A	662	-58.285	-13.567	70.698	1.00	21.74
5325	CB	VAL	A	662	-58.738	-12.098	70.979	1.00	21.98
5326	CG1	VAL	A	662	-59.891	-12.035	71.964	1.00	21.08
5327	CG2	VAL	A	662	-57.565	-11.238	71.384	1.00	22.47
5328	C	VAL	A	662	-56.797	-13.692	70.511	1.00	20.40
5329	O	VAL	A	662	-56.296	-13.411	69.441	1.00	19.95
5330	N	MET	A	663	-56.087	-14.152	71.527	1.00	20.78
5331	CA	MET	A	663	-54.637	-14.288	71.382	1.00	20.68
5332	CB	MET	A	663	-53.975	-14.914	72.625	1.00	20.17
5333	CG	MET	A	663	-53.737	-13.912	73.760	1.00	19.42
5334	SD	MET	A	663	-55.332	-13.456	74.451	1.00	20.98
5335	CE	MET	A	663	-55.659	-14.841	75.532	1.00	17.84
5336	C	MET	A	663	-54.281	-15.069	70.119	1.00	21.08
5337	O	MET	A	663	-53.339	-14.719	69.432	1.00	20.76
5338	N	SER	A	664	-55.053	-16.107	69.804	1.00	21.53
5339	CA	SER	A	664	-54.755	-16.933	68.632	1.00	22.75
5340	CB	SER	A	664	-55.595	-18.205	68.612	1.00	22.81
5341	OG	SER	A	664	-56.965	-17.921	68.354	1.00	24.70
5342	C	SER	A	664	-54.902	-16.199	67.310	1.00	23.01
5343	O	SER	A	664	-54.343	-16.623	66.291	1.00	24.23
5344	N	ARG	A	665	-55.618	-15.088	67.312	1.00	22.62
5345	CA	ARG	A	665	-55.791	-14.335	66.088	1.00	22.32

FIGURE 3 DA

A	B	C	D	E	F	G	H	I	J
5346	CB	ARG	A	665	-57.232	-13.903	65.980	1.00	23.29
5347	CG	ARG	A	665	-58.141	-15.116	66.007	1.00	23.73
5348	CD	ARG	A	665	-59.572	-14.808	66.178	1.00	26.81
5349	NE	ARG	A	665	-60.402	-15.948	65.794	1.00	27.93
5350	CZ	ARG	A	665	-61.511	-15.830	65.078	1.00	29.01
5351	NH1	ARG	A	665	-61.919	-14.625	64.656	1.00	24.12
5352	NH2	ARG	A	665	-62.211	-16.924	64.796	1.00	29.75
5353	C	ARG	A	665	-54.844	-13.159	65.964	1.00	22.41
5354	O	ARG	A	665	-54.975	-12.361	65.049	1.00	22.42
5355	N	ALA	A	666	-53.859	-13.094	66.855	1.00	21.95
5356	CA	ALA	A	666	-52.920	-11.974	66.912	1.00	23.05
5357	CB	ALA	A	666	-51.776	-12.291	67.873	1.00	22.46
5358	C	ALA	A	666	-52.370	-11.513	65.570	1.00	23.45
5359	O	ALA	A	666	-52.439	-10.321	65.232	1.00	23.40
5360	N	GLU	A	667	-51.844	-12.457	64.798	1.00	24.34
5361	CA	GLU	A	667	-51.210	-12.104	63.529	1.00	26.02
5362	CB	GLU	A	667	-50.722	-13.356	62.816	1.00	26.46
5363	CG	GLU	A	667	-50.092	-13.078	61.468	1.00	30.53
5364	CD	GLU	A	667	-48.626	-12.715	61.584	1.00	36.20
5365	OE1	GLU	A	667	-48.065	-12.186	60.598	1.00	38.89
5366	OE2	GLU	A	667	-48.027	-12.972	62.659	1.00	39.46
5367	C	GLU	A	667	-52.072	-11.259	62.580	1.00	25.57
5368	O	GLU	A	667	-51.566	-10.381	61.889	1.00	25.83
5369	N	ASN	A	668	-53.371	-11.517	62.561	1.00	25.39
5370	CA	ASN	A	668	-54.257	-10.785	61.668	1.00	25.55
5371	CB	ASN	A	668	-55.585	-11.516	61.495	1.00	25.59
5372	CG	ASN	A	668	-55.426	-12.848	60.788	1.00	27.16
5373	OD1	ASN	A	668	-54.536	-13.024	59.946	1.00	29.15
5374	ND2	ASN	A	668	-56.277	-13.797	61.135	1.00	26.82
5375	C	ASN	A	668	-54.503	-9.345	62.084	1.00	25.01
5376	O	ASN	A	668	-55.031	-8.562	61.298	1.00	25.54
5377	N	PHE	A	669	-54.142	-8.994	63.310	1.00	24.54
5378	CA	PHE	A	669	-54.315	-7.622	63.743	1.00	24.00
5379	CB	PHE	A	669	-54.077	-7.469	65.245	1.00	23.84
5380	CG	PHE	A	669	-55.266	-7.839	66.080	1.00	24.47
5381	CD1	PHE	A	669	-55.617	-9.168	66.257	1.00	22.23
5382	CE1	PHE	A	669	-56.680	-9.516	67.027	1.00	21.34
5383	CZ	PHE	A	669	-57.459	-8.528	67.625	1.00	22.55
5384	CE2	PHE	A	669	-57.132	-7.194	67.447	1.00	23.64
5385	CD2	PHE	A	669	-56.043	-6.854	66.680	1.00	24.33
5386	C	PHE	A	669	-53.377	-6.741	62.945	1.00	23.82
5387	O	PHE	A	669	-53.424	-5.536	63.067	1.00	22.53
5388	N	LYS	A	670	-52.517	-7.348	62.127	1.00	24.69
5389	CA	LYS	A	670	-51.615	-6.558	61.292	1.00	26.25
5390	CB	LYS	A	670	-50.587	-7.438	60.566	1.00	26.78
5391	CG	LYS	A	670	-49.279	-7.584	61.318	1.00	28.50
5392	CD	LYS	A	670	-48.530	-8.859	60.937	1.00	31.27
5393	CE	LYS	A	670	-47.245	-8.973	61.731	1.00	30.90
5394	NZ	LYS	A	670	-46.732	-10.369	61.735	1.00	34.92
5395	C	LYS	A	670	-52.409	-5.763	60.276	1.00	26.83
5396	O	LYS	A	670	-51.940	-4.740	59.777	1.00	27.69

FIGURE 3 DB

A	B	C	D	E	F	G	H	I	J
5397	N	GLN	A	671	-53.620	-6.217	59.986	1.00	26.93
5398	CA	GLN	A	671	-54.414	-5.571	58.959	1.00	27.96
5399	CB	GLN	A	671	-55.258	-6.606	58.208	1.00	28.50
5400	CG	GLN	A	671	-54.473	-7.775	57.642	1.00	30.95
5401	CD	GLN	A	671	-55.378	-8.962	57.268	1.00	34.31
5402	OE1	GLN	A	671	-55.012	-10.121	57.502	1.00	36.61
5403	NE2	GLN	A	671	-56.532	-8.675	56.663	1.00	33.79
5404	C	GLN	A	671	-55.338	-4.472	59.471	1.00	27.43
5405	O	GLN	A	671	-56.012	-3.837	58.677	1.00	27.84
5406	N	VAL	A	672	-55.390	-4.239	60.775	1.00	26.34
5407	CA	VAL	A	672	-56.322	-3.242	61.267	1.00	25.27
5408	CB	VAL	A	672	-57.529	-3.897	61.964	1.00	25.36
5409	CG1	VAL	A	672	-58.253	-4.844	61.057	1.00	24.92
5410	CG2	VAL	A	672	-57.084	-4.616	63.233	1.00	25.04
5411	C	VAL	A	672	-55.722	-2.294	62.291	1.00	25.60
5412	O	VAL	A	672	-54.597	-2.452	62.760	1.00	24.76
5413	N	GLU	A	673	-56.510	-1.303	62.662	1.00	25.82
5414	CA	GLU	A	673	-56.108	-0.426	63.734	1.00	26.21
5415	CB	GLU	A	673	-56.278	1.027	63.307	1.00	26.66
5416	CG	GLU	A	673	-55.093	1.493	62.474	1.00	32.84
5417	CD	GLU	A	673	-55.499	2.115	61.157	1.00	38.58
5418	OE1	GLU	A	673	-56.193	3.152	61.183	1.00	39.09
5419	OE2	GLU	A	673	-55.135	1.543	60.091	1.00	43.37
5420	C	GLU	A	673	-56.906	-0.800	64.979	1.00	24.83
5421	O	GLU	A	673	-58.126	-0.930	64.925	1.00	24.87
5422	N	TYR	A	674	-56.208	-0.944	66.097	1.00	23.74
5423	CA	TYR	A	674	-56.796	-1.468	67.305	1.00	23.16
5424	CB	TYR	A	674	-56.128	-2.803	67.576	1.00	23.69
5425	CG	TYR	A	674	-56.730	-3.691	68.635	1.00	22.50
5426	CD1	TYR	A	674	-58.097	-3.782	68.818	1.00	21.88
5427	CE1	TYR	A	674	-58.626	-4.653	69.757	1.00	20.32
5428	CZ	TYR	A	674	-57.776	-5.446	70.510	1.00	20.63
5429	OH	TYR	A	674	-58.278	-6.317	71.470	1.00	19.71
5430	CE2	TYR	A	674	-56.419	-5.349	70.355	1.00	19.78
5431	CD2	TYR	A	674	-55.909	-4.494	69.419	1.00	22.86
5432	C	TYR	A	674	-56.521	-0.613	68.505	1.00	22.50
5433	O	TYR	A	674	-55.378	-0.217	68.761	1.00	22.76
5434	N	LEU	A	675	-57.572	-0.373	69.276	1.00	21.36
5435	CA	LEU	A	675	-57.442	0.346	70.520	1.00	20.60
5436	CB	LEU	A	675	-58.244	1.624	70.470	1.00	20.09
5437	CG	LEU	A	675	-58.453	2.411	71.752	1.00	21.82
5438	CD1	LEU	A	675	-57.128	2.565	72.554	1.00	21.00
5439	CD2	LEU	A	675	-59.092	3.773	71.432	1.00	17.43
5440	C	LEU	A	675	-57.943	-0.620	71.576	1.00	20.21
5441	O	LEU	A	675	-59.030	-1.156	71.458	1.00	19.19
5442	N	LEU	A	676	-57.110	-0.868	72.584	1.00	20.43
5443	CA	LEU	A	676	-57.418	-1.836	73.615	1.00	20.25
5444	CB	LEU	A	676	-56.354	-2.928	73.589	1.00	20.35
5445	CG	LEU	A	676	-56.403	-3.988	74.699	1.00	21.03
5446	CD1	LEU	A	676	-55.232	-4.949	74.527	1.00	20.07
5447	CD2	LEU	A	676	-57.710	-4.750	74.712	1.00	15.68

FIGURE 3 DC

A	B	C	D	E	F	G	H	I	J
5448	C	LEU	A	676	-57.443	-1.106	74.963	1.00	20.14
5449	O	LEU	A	676	-56.462	-0.496	75.364	1.00	20.18
5450	N	ILE	A	677	-58.565	-1.186	75.665	1.00	19.62
5451	CA	ILE	A	677	-58.738	-0.410	76.869	1.00	18.78
5452	CB	ILE	A	677	-59.777	0.703	76.578	1.00	19.27
5453	CG1	ILE	A	677	-59.247	1.648	75.487	1.00	18.01
5454	CD1	ILE	A	677	-60.282	2.598	74.961	1.00	19.97
5455	CG2	ILE	A	677	-60.155	1.467	77.858	1.00	17.07
5456	C	ILE	A	677	-59.247	-1.287	77.964	1.00	18.90
5457	O	ILE	A	677	-60.118	-2.124	77.732	1.00	19.18
5458	N	HIS	A	678	-58.729	-1.093	79.172	1.00	18.70
5459	CA	HIS	A	678	-59.159	-1.919	80.307	1.00	18.53
5460	CB	HIS	A	678	-58.382	-3.248	80.293	1.00	17.83
5461	CG	HIS	A	678	-59.202	-4.430	80.703	1.00	16.75
5462	ND1	HIS	A	678	-59.772	-4.538	81.950	1.00	16.89
5463	CE1	HIS	A	678	-60.449	-5.670	82.028	1.00	15.28
5464	NE2	HIS	A	678	-60.325	-6.305	80.878	1.00	17.63
5465	CD2	HIS	A	678	-59.550	-5.552	80.031	1.00	13.04
5466	C	HIS	A	678	-58.927	-1.205	81.638	1.00	18.25
5467	O	HIS	A	678	-57.954	-0.495	81.797	1.00	18.44
5468	N	GLY	A	679	-59.814	-1.413	82.599	1.00	18.83
5469	CA	GLY	A	679	-59.635	-0.847	83.926	1.00	18.61
5470	C	GLY	A	679	-58.778	-1.817	84.730	1.00	19.16
5471	O	GLY	A	679	-59.034	-3.026	84.694	1.00	18.63
5472	N	THR	A	680	-57.786	-1.307	85.462	1.00	19.32
5473	CA	THR	A	680	-56.872	-2.181	86.193	1.00	20.63
5474	CB	THR	A	680	-55.611	-1.449	86.652	1.00	20.52
5475	OG1	THR	A	680	-55.945	-0.454	87.629	1.00	19.71
5476	CG2	THR	A	680	-54.998	-0.692	85.487	1.00	19.76
5477	C	THR	A	680	-57.503	-2.854	87.369	1.00	21.04
5478	O	THR	A	680	-56.991	-3.857	87.844	1.00	21.57
5479	N	ALA	A	681	-58.629	-2.324	87.828	1.00	21.61
5480	CA	ALA	A	681	-59.307	-2.924	88.969	1.00	21.60
5481	CB	ALA	A	681	-59.531	-1.881	90.106	1.00	21.79
5482	C	ALA	A	681	-60.612	-3.564	88.560	1.00	21.42
5483	O	ALA	A	681	-61.578	-3.609	89.346	1.00	22.68
5484	N	ASP	A	682	-60.662	-4.057	87.331	1.00	20.59
5485	CA	ASP	A	682	-61.843	-4.783	86.874	1.00	19.76
5486	CB	ASP	A	682	-61.781	-4.986	85.369	1.00	19.79
5487	CG	ASP	A	682	-63.096	-5.370	84.787	1.00	19.27
5488	OD1	ASP	A	682	-63.365	-4.926	83.648	1.00	18.05
5489	OD2	ASP	A	682	-63.924	-6.116	85.384	1.00	20.65
5490	C	ASP	A	682	-61.849	-6.143	87.574	1.00	19.39
5491	O	ASP	A	682	-60.920	-6.949	87.388	1.00	20.06
5492	N	ASP	A	683	-62.873	-6.368	88.383	1.00	17.86
5493	CA	ASP	A	683	-63.053	-7.579	89.154	1.00	18.48
5494	CB	ASP	A	683	-63.826	-7.242	90.432	1.00	17.90
5495	CG	ASP	A	683	-65.169	-6.613	90.128	1.00	18.77
5496	OD1	ASP	A	683	-65.198	-5.405	89.794	1.00	18.95
5497	OD2	ASP	A	683	-66.254	-7.240	90.165	1.00	19.04
5498	C	ASP	A	683	-63.903	-8.579	88.399	1.00	18.58



FIGURE 3 DD

A	B	C	D	E	F	G	H	I	J
5499	O	ASP	A	683	-64.084	-9.715	88.837	1.00	18.03
5500	N	ASN	A	684	-64.458	-8.115	87.288	1.00	19.43
5501	CA	ASN	A	684	-65.363	-8.906	86.477	1.00	20.04
5502	CB	ASN	A	684	-66.486	-8.023	85.949	1.00	20.24
5503	CG	ASN	A	684	-67.604	-8.818	85.340	1.00	19.66
5504	OD1	ASN	A	684	-68.750	-8.370	85.273	1.00	21.80
5505	ND2	ASN	A	684	-67.288	-9.999	84.902	1.00	20.70
5506	C	ASN	A	684	-64.596	-9.559	85.343	1.00	19.82
5507	O	ASN	A	684	-64.396	-10.765	85.359	1.00	19.74
5508	N	VAL	A	685	-64.199	-8.779	84.343	1.00	20.03
5509	CA	VAL	A	685	-63.270	-9.312	83.354	1.00	20.08
5510	CB	VAL	A	685	-63.752	-9.284	81.849	1.00	20.03
5511	CG1	VAL	A	685	-64.884	-8.373	81.618	1.00	20.16
5512	CG2	VAL	A	685	-62.583	-9.198	80.825	1.00	19.81
5513	C	VAL	A	685	-61.916	-8.742	83.711	1.00	20.09
5514	O	VAL	A	685	-61.650	-7.544	83.611	1.00	20.35
5515	N	HIS	A	686	-61.075	-9.631	84.213	1.00	20.12
5516	CA	HIS	A	686	-59.821	-9.218	84.812	1.00	19.79
5517	CB	HIS	A	686	-59.188	-10.425	85.511	1.00	19.73
5518	CG	HIS	A	686	-60.135	-11.064	86.471	1.00	20.36
5519	ND1	HIS	A	686	-60.197	-12.425	86.682	1.00	20.39
5520	CE1	HIS	A	686	-61.167	-12.685	87.546	1.00	22.42
5521	NE2	HIS	A	686	-61.730	-11.542	87.905	1.00	21.66
5522	CD2	HIS	A	686	-61.111	-10.514	87.238	1.00	19.34
5523	C	HIS	A	686	-58.934	-8.539	83.811	1.00	19.06
5524	O	HIS	A	686	-58.963	-8.878	82.636	1.00	19.35
5525	N	PHE	A	687	-58.200	-7.543	84.268	1.00	17.93
5526	CA	PHE	A	687	-57.250	-6.840	83.421	1.00	18.46
5527	CB	PHE	A	687	-56.450	-5.821	84.258	1.00	17.73
5528	CG	PHE	A	687	-55.409	-5.065	83.474	1.00	16.73
5529	CD1	PHE	A	687	-55.747	-3.918	82.766	1.00	17.46
5530	CE1	PHE	A	687	-54.778	-3.202	82.024	1.00	17.04
5531	CZ	PHE	A	687	-53.453	-3.649	82.030	1.00	18.40
5532	CE2	PHE	A	687	-53.115	-4.795	82.754	1.00	19.00
5533	CD2	PHE	A	687	-54.091	-5.498	83.457	1.00	16.43
5534	C	PHE	A	687	-56.320	-7.855	82.761	1.00	19.20
5535	O	PHE	A	687	-55.843	-7.643	81.629	1.00	20.05
5536	N	GLN	A	688	-56.056	-8.946	83.485	1.00	19.16
5537	CA	GLN	A	688	-55.316	-10.095	82.956	1.00	19.67
5538	CB	GLN	A	688	-55.745	-11.339	83.745	1.00	18.80
5539	CG	GLN	A	688	-55.330	-12.648	83.117	1.00	18.72
5540	CD	GLN	A	688	-56.070	-13.822	83.682	1.00	19.04
5541	OE1	GLN	A	688	-57.240	-13.709	84.032	1.00	21.89
5542	NE2	GLN	A	688	-55.409	-14.963	83.756	1.00	19.69
5543	C	GLN	A	688	-55.685	-10.360	81.510	1.00	20.02
5544	O	GLN	A	688	-54.869	-10.617	80.628	1.00	20.99
5545	N	GLN	A	689	-56.969	-10.303	81.295	1.00	20.02
5546	CA	GLN	A	689	-57.558	-10.662	80.022	1.00	21.16
5547	CB	GLN	A	689	-59.068	-10.641	80.242	1.00	20.04
5548	CG	GLN	A	689	-59.791	-11.314	79.236	1.00	24.17
5549	CD	GLN	A	689	-60.562	-12.518	79.697	1.00	22.03

FIGURE 3 DE

A	B	C	D	E	F	G	H	I	J
5550	OE1	GLN	A	689	-60.625	-13.434	78.941	1.00	23.32
5551	NE2	GLN	A	689	-61.210	-12.487	80.877	1.00	18.54
5552	C	GLN	A	689	-57.040	-9.780	78.842	1.00	20.37
5553	O	GLN	A	689	-56.679	-10.282	77.769	1.00	19.90
5554	N	SER	A	690	-56.914	-8.477	79.070	1.00	20.07
5555	CA	SER	A	690	-56.309	-7.607	78.066	1.00	19.13
5556	CB	SER	A	690	-56.806	-6.175	78.221	1.00	19.29
5557	OG	SER	A	690	-58.131	-6.079	77.729	1.00	19.94
5558	C	SER	A	690	-54.778	-7.635	78.140	1.00	18.61
5559	O	SER	A	690	-54.082	-7.416	77.147	1.00	18.97
5560	N	ALA	A	691	-54.241	-7.901	79.309	1.00	17.44
5561	CA	ALA	A	691	-52.808	-8.011	79.391	1.00	18.16
5562	CB	ALA	A	691	-52.344	-8.171	80.835	1.00	17.77
5563	C	ALA	A	691	-52.340	-9.186	78.516	1.00	18.66
5564	O	ALA	A	691	-51.245	-9.157	77.964	1.00	18.93
5565	N	GLN	A	692	-53.179	-10.199	78.358	1.00	18.73
5566	CA	GLN	A	692	-52.806	-11.332	77.510	1.00	19.69
5567	CB	GLN	A	692	-53.576	-12.603	77.892	1.00	18.56
5568	CG	GLN	A	692	-53.201	-13.095	79.275	1.00	20.39
5569	CD	GLN	A	692	-51.780	-13.645	79.376	1.00	23.39
5570	OE1	GLN	A	692	-50.982	-13.499	78.466	1.00	25.31
5571	NE2	GLN	A	692	-51.474	-14.301	80.497	1.00	26.76
5572	C	GLN	A	692	-52.949	-11.005	76.036	1.00	20.10
5573	O	GLN	A	692	-52.187	-11.506	75.223	1.00	21.08
5574	N	ILE	A	693	-53.886	-10.130	75.692	1.00	20.67
5575	CA	ILE	A	693	-54.047	-9.709	74.305	1.00	20.84
5576	CB	ILE	A	693	-55.325	-8.836	74.151	1.00	20.74
5577	CG1	ILE	A	693	-56.601	-9.653	74.369	1.00	21.91
5578	CD1	ILE	A	693	-57.898	-8.813	74.261	1.00	20.81
5579	CG2	ILE	A	693	-55.353	-8.152	72.786	1.00	19.56
5580	C	ILE	A	693	-52.859	-8.863	73.881	1.00	21.49
5581	O	ILE	A	693	-52.344	-8.991	72.758	1.00	22.44
5582	N	SER	A	694	-52.441	-7.955	74.766	1.00	21.62
5583	CA	SER	A	694	-51.366	-7.025	74.430	1.00	20.99
5584	CB	SER	A	694	-51.237	-5.936	75.509	1.00	21.40
5585	OG	SER	A	694	-50.800	-6.466	76.767	1.00	21.44
5586	C	SER	A	694	-50.046	-7.776	74.245	1.00	20.98
5587	O	SER	A	694	-49.299	-7.497	73.318	1.00	20.54
5588	N	LYS	A	695	-49.788	-8.757	75.108	1.00	20.70
5589	CA	LYS	A	695	-48.558	-9.527	75.042	1.00	21.06
5590	CB	LYS	A	695	-48.450	-10.469	76.253	1.00	21.11
5591	CG	LYS	A	695	-47.228	-11.380	76.223	1.00	19.11
5592	CD	LYS	A	695	-46.817	-11.821	77.621	1.00	17.75
5593	CE	LYS	A	695	-47.969	-12.543	78.326	1.00	22.33
5594	NZ	LYS	A	695	-48.205	-13.939	77.821	1.00	21.64
5595	C	LYS	A	695	-48.480	-10.325	73.744	1.00	21.90
5596	O	LYS	A	695	-47.430	-10.384	73.090	1.00	22.18
5597	N	ALA	A	696	-49.605	-10.923	73.367	1.00	21.75
5598	CA	ALA	A	696	-49.674	-11.701	72.152	1.00	22.10
5599	CB	ALA	A	696	-51.026	-12.427	72.071	1.00	22.32
5600	C	ALA	A	696	-49.453	-10.814	70.915	1.00	22.60

FIGURE 3 DF

A	B	C	D	E	F	G	H	I	J
5601	O	ALA	A	696	-48.814	-11.235	69.941	1.00	23.63
5602	N	LEU	A	697	-49.980	-9.596	70.945	1.00	21.62
5603	CA	LEU	A	697	-49.785	-8.680	69.833	1.00	21.54
5604	CB	LEU	A	697	-50.685	-7.455	69.976	1.00	20.89
5605	CG	LEU	A	697	-52.164	-7.826	69.864	1.00	20.86
5606	CD1	LEU	A	697	-53.084	-6.621	70.175	1.00	20.00
5607	CD2	LEU	A	697	-52.411	-8.383	68.457	1.00	19.20
5608	C	LEU	A	697	-48.343	-8.255	69.744	1.00	21.66
5609	O	LEU	A	697	-47.749	-8.208	68.671	1.00	22.68
5610	N	VAL	A	698	-47.772	-7.950	70.889	1.00	21.80
5611	CA	VAL	A	698	-46.386	-7.580	70.947	1.00	21.82
5612	CB	VAL	A	698	-45.956	-7.293	72.411	1.00	21.78
5613	CG1	VAL	A	698	-44.448	-7.058	72.492	1.00	19.00
5614	CG2	VAL	A	698	-46.718	-6.080	72.932	1.00	21.15
5615	C	VAL	A	698	-45.543	-8.695	70.373	1.00	22.31
5616	O	VAL	A	698	-44.636	-8.464	69.582	1.00	22.30
5617	N	ASP	A	699	-45.837	-9.912	70.793	1.00	23.20
5618	CA	ASP	A	699	-45.087	-11.066	70.341	1.00	24.23
5619	CB	ASP	A	699	-45.472	-12.288	71.163	1.00	24.60
5620	CG	ASP	A	699	-44.916	-12.227	72.576	1.00	28.11
5621	OD1	ASP	A	699	-45.394	-13.002	73.438	1.00	31.21
5622	OD2	ASP	A	699	-44.003	-11.428	72.913	1.00	29.15
5623	C	ASP	A	699	-45.139	-11.357	68.835	1.00	24.78
5624	O	ASP	A	699	-44.295	-12.089	68.344	1.00	25.40
5625	N	VAL	A	700	-46.113	-10.814	68.103	1.00	25.13
5626	CA	VAL	A	700	-46.132	-10.998	66.650	1.00	25.71
5627	CB	VAL	A	700	-47.475	-11.541	66.081	1.00	26.39
5628	CG1	VAL	A	700	-48.681	-10.797	66.679	1.00	26.60
5629	CG2	VAL	A	700	-47.501	-11.325	64.590	1.00	29.63
5630	C	VAL	A	700	-45.819	-9.673	65.980	1.00	25.45
5631	O	VAL	A	700	-45.959	-9.515	64.770	1.00	24.57
5632	N	GLY	A	701	-45.410	-8.696	66.779	1.00	25.84
5633	CA	GLY	A	701	-44.989	-7.427	66.221	1.00	25.28
5634	C	GLY	A	701	-46.071	-6.590	65.564	1.00	25.90
5635	O	GLY	A	701	-45.807	-5.945	64.545	1.00	26.61
5636	N	VAL	A	702	-47.284	-6.577	66.114	1.00	25.54
5637	CA	VAL	A	702	-48.278	-5.673	65.569	1.00	25.62
5638	CB	VAL	A	702	-49.634	-6.333	65.229	1.00	25.87
5639	CG1	VAL	A	702	-49.524	-7.843	65.210	1.00	27.50
5640	CG2	VAL	A	702	-50.733	-5.851	66.159	1.00	25.14
5641	C	VAL	A	702	-48.462	-4.476	66.487	1.00	25.24
5642	O	VAL	A	702	-48.465	-4.601	67.721	1.00	25.45
5643	N	ASP	A	703	-48.572	-3.298	65.897	1.00	25.10
5644	CA	ASP	A	703	-48.762	-2.146	66.727	1.00	25.76
5645	CB	ASP	A	703	-47.982	-0.927	66.251	1.00	26.50
5646	CG	ASP	A	703	-47.352	-0.205	67.422	1.00	29.15
5647	OD1	ASP	A	703	-47.844	0.867	67.752	1.00	27.65
5648	OD2	ASP	A	703	-46.386	-0.691	68.098	1.00	34.54
5649	C	ASP	A	703	-50.233	-1.833	66.921	1.00	25.15
5650	O	ASP	A	703	-51.064	-2.154	66.089	1.00	25.14
5651	N	PHE	A	704	-50.539	-1.205	68.041	1.00	24.41

FIGURE 3 DG

A	B	C	D	E	F	G	H	I	J
5652	CA	PHE	A	704	-51.918	-0.982	68.392	1.00	23.98
5653	CB	PHE	A	704	-52.511	-2.289	68.902	1.00	23.42
5654	CG	PHE	A	704	-51.854	-2.793	70.144	1.00	21.87
5655	CD1	PHE	A	704	-52.307	-2.394	71.390	1.00	20.47
5656	CE1	PHE	A	704	-51.689	-2.862	72.555	1.00	20.10
5657	CZ	PHE	A	704	-50.622	-3.722	72.466	1.00	19.75
5658	CE2	PHE	A	704	-50.158	-4.120	71.228	1.00	20.84
5659	CD2	PHE	A	704	-50.769	-3.654	70.072	1.00	20.98
5660	C	PHE	A	704	-51.944	0.064	69.481	1.00	23.79
5661	O	PHE	A	704	-50.896	0.405	70.040	1.00	23.48
5662	N	GLN	A	705	-53.135	0.573	69.776	1.00	23.59
5663	CA	GLN	A	705	-53.276	1.629	70.780	1.00	23.77
5664	CB	GLN	A	705	-54.343	2.639	70.368	1.00	24.73
5665	CG	GLN	A	705	-54.119	3.225	69.034	1.00	27.99
5666	CD	GLN	A	705	-52.835	3.950	69.005	1.00	34.84
5667	OE1	GLN	A	705	-51.939	3.604	68.216	1.00	39.07
5668	NE2	GLN	A	705	-52.703	4.957	69.874	1.00	34.12
5669	C	GLN	A	705	-53.751	0.998	72.032	1.00	22.34
5670	O	GLN	A	705	-54.492	0.039	71.989	1.00	22.88
5671	N	ALA	A	706	-53.361	1.563	73.151	1.00	21.59
5672	CA	ALA	A	706	-53.754	1.015	74.427	1.00	21.27
5673	CB	ALA	A	706	-52.656	0.139	74.981	1.00	21.03
5674	C	ALA	A	706	-54.076	2.096	75.417	1.00	21.31
5675	O	ALA	A	706	-53.567	3.219	75.350	1.00	21.42
5676	N	MET	A	707	-54.946	1.756	76.347	1.00	21.58
5677	CA	MET	A	707	-55.193	2.650	77.456	1.00	21.80
5678	CB	MET	A	707	-56.241	3.703	77.093	1.00	20.90
5679	CG	MET	A	707	-56.551	4.628	78.247	1.00	23.88
5680	SD	MET	A	707	-55.230	5.830	78.520	1.00	25.22
5681	CE	MET	A	707	-55.541	6.235	80.200	1.00	31.39
5682	C	MET	A	707	-55.670	1.827	78.638	1.00	21.25
5683	O	MET	A	707	-56.672	1.152	78.542	1.00	22.25
5684	N	TRP	A	708	-54.955	1.893	79.748	1.00	21.26
5685	CA	TRP	A	708	-55.383	1.243	80.986	1.00	21.09
5686	CB	TRP	A	708	-54.159	0.674	81.733	1.00	20.16
5687	CG	TRP	A	708	-53.290	1.679	82.397	1.00	21.34
5688	CD1	TRP	A	708	-53.524	2.319	83.592	1.00	20.72
5689	NE1	TRP	A	708	-52.496	3.189	83.869	1.00	19.65
5690	CE2	TRP	A	708	-51.559	3.112	82.873	1.00	20.47
5691	CD2	TRP	A	708	-52.019	2.169	81.930	1.00	21.66
5692	CE3	TRP	A	708	-51.227	1.907	80.809	1.00	19.72
5693	CZ3	TRP	A	708	-50.039	2.560	80.675	1.00	20.65
5694	CH2	TRP	A	708	-49.610	3.499	81.630	1.00	20.89
5695	CZ2	TRP	A	708	-50.348	3.775	82.735	1.00	20.23
5696	C	TRP	A	708	-56.063	2.326	81.826	1.00	20.98
5697	O	TRP	A	708	-55.741	3.488	81.679	1.00	21.48
5698	N	TYR	A	709	-57.015	1.973	82.678	1.00	20.79
5699	CA	TYR	A	709	-57.582	2.972	83.596	1.00	19.76
5700	CB	TYR	A	709	-59.065	3.279	83.313	1.00	19.02
5701	CG	TYR	A	709	-59.226	4.211	82.143	1.00	17.81
5702	CD1	TYR	A	709	-59.054	5.604	82.282	1.00	15.94

FIGURE 3 DH

A	B	C	D	E	F	G	H	I	J
5703	CE1	TYR	A	709	-59.196	6.453	81.179	1.00	16.02
5704	CZ	TYR	A	709	-59.480	5.894	79.914	1.00	18.36
5705	OH	TYR	A	709	-59.627	6.670	78.773	1.00	19.00
5706	CE2	TYR	A	709	-59.626	4.525	79.768	1.00	15.11
5707	CD2	TYR	A	709	-59.502	3.699	80.871	1.00	16.48
5708	C	TYR	A	709	-57.340	2.570	85.042	1.00	19.87
5709	O	TYR	A	709	-57.962	1.669	85.575	1.00	19.67
5710	N	THR	A	710	-56.400	3.253	85.664	1.00	20.79
5711	CA	THR	A	710	-56.017	2.973	87.025	1.00	21.00
5712	CB	THR	A	710	-55.062	4.049	87.479	1.00	21.32
5713	OG1	THR	A	710	-53.905	4.050	86.629	1.00	23.26
5714	CG2	THR	A	710	-54.539	3.759	88.852	1.00	20.93
5715	C	THR	A	710	-57.225	2.988	87.934	1.00	21.30
5716	O	THR	A	710	-57.931	3.991	87.991	1.00	21.23
5717	N	ASP	A	711	-57.437	1.863	88.619	1.00	20.65
5718	CA	ASP	A	711	-58.451	1.681	89.660	1.00	21.12
5719	CB	ASP	A	711	-58.255	2.651	90.843	1.00	20.66
5720	CG	ASP	A	711	-56.972	2.389	91.609	1.00	22.62
5721	OD1	ASP	A	711	-56.480	3.311	92.335	1.00	23.36
5722	OD2	ASP	A	711	-56.362	1.295	91.533	1.00	23.12
5723	C	ASP	A	711	-59.887	1.669	89.176	1.00	21.05
5724	O	ASP	A	711	-60.828	1.591	89.969	1.00	21.25
5725	N	GLU	A	712	-60.071	1.733	87.872	1.00	21.35
5726	CA	GLU	A	712	-61.418	1.654	87.347	1.00	21.45
5727	CB	GLU	A	712	-61.489	2.370	86.016	1.00	21.52
5728	CG	GLU	A	712	-61.321	3.874	86.177	1.00	23.03
5729	CD	GLU	A	712	-62.496	4.500	86.923	1.00	25.84
5730	OE1	GLU	A	712	-62.284	5.209	87.913	1.00	28.25
5731	OE2	GLU	A	712	-63.650	4.274	86.528	1.00	29.59
5732	C	GLU	A	712	-61.897	0.200	87.255	1.00	21.45
5733	O	GLU	A	712	-61.091	-0.707	87.054	1.00	21.45
5734	N	ASP	A	713	-63.196	-0.044	87.448	1.00	21.48
5735	CA	ASP	A	713	-63.659	-1.418	87.327	1.00	21.88
5736	CB	ASP	A	713	-64.536	-1.860	88.504	1.00	21.50
5737	CG	ASP	A	713	-65.855	-1.156	88.557	1.00	21.33
5738	OD1	ASP	A	713	-66.584	-1.385	89.538	1.00	22.46
5739	OD2	ASP	A	713	-66.263	-0.376	87.685	1.00	22.10
5740	C	ASP	A	713	-64.265	-1.709	85.963	1.00	22.03
5741	O	ASP	A	713	-63.952	-1.033	85.013	1.00	22.71
5742	N	HIS	A	714	-65.111	-2.719	85.858	1.00	22.81
5743	CA	HIS	A	714	-65.653	-3.106	84.562	1.00	23.58
5744	CB	HIS	A	714	-66.471	-4.389	84.669	1.00	23.35
5745	CG	HIS	A	714	-66.651	-5.079	83.359	1.00	23.79
5746	ND1	HIS	A	714	-65.593	-5.358	82.523	1.00	25.47
5747	CE1	HIS	A	714	-66.042	-5.947	81.429	1.00	23.28
5748	NE2	HIS	A	714	-67.349	-6.067	81.533	1.00	23.63
5749	CD2	HIS	A	714	-67.758	-5.520	82.723	1.00	23.05
5750	C	HIS	A	714	-66.496	-2.034	83.892	1.00	24.39
5751	O	HIS	A	714	-66.584	-1.985	82.668	1.00	24.97
5752	N	GLY	A	715	-67.112	-1.165	84.686	1.00	24.59
5753	CA	GLY	A	715	-67.922	-0.113	84.108	1.00	23.89

FIGURE 3 DI

A	B	C	D	E	F	G	H	I	J
5754	C	GLY	A	715	-67.139	1.133	83.718	1.00	23.81
5755	O	GLY	A	715	-67.711	2.028	83.102	1.00	23.91
5756	N	ILE	A	716	-65.844	1.189	84.044	1.00	23.22
5757	CA	ILE	A	716	-65.056	2.404	83.824	1.00	23.24
5758	CB	ILE	A	716	-64.378	2.441	82.452	1.00	22.71
5759	CG1	ILE	A	716	-63.681	1.101	82.158	1.00	22.49
5760	CD1	ILE	A	716	-62.688	1.176	81.007	1.00	20.92
5761	CG2	ILE	A	716	-63.382	3.573	82.430	1.00	19.75
5762	C	ILE	A	716	-65.990	3.594	83.988	1.00	24.33
5763	O	ILE	A	716	-66.240	4.386	83.065	1.00	23.79
5764	N	ALA	A	717	-66.500	3.740	85.193	1.00	25.20
5765	CA	ALA	A	717	-67.605	4.648	85.317	1.00	26.42
5766	CB	ALA	A	717	-68.916	3.843	85.641	1.00	25.98
5767	C	ALA	A	717	-67.417	5.843	86.239	1.00	26.81
5768	O	ALA	A	717	-68.328	6.653	86.343	1.00	28.31
5769	N	SER	A	718	-66.283	5.967	86.923	1.00	26.76
5770	CA	SER	A	718	-66.050	7.219	87.640	1.00	26.89
5771	CB	SER	A	718	-64.600	7.418	88.008	1.00	25.63
5772	OG	SER	A	718	-64.179	6.429	88.906	1.00	31.72
5773	C	SER	A	718	-66.360	8.302	86.634	1.00	26.49
5774	O	SER	A	718	-66.133	8.132	85.437	1.00	26.34
5775	N	SER	A	719	-66.824	9.433	87.124	1.00	26.34
5776	CA	SER	A	719	-67.100	10.557	86.253	1.00	26.36
5777	CB	SER	A	719	-67.604	11.729	87.091	1.00	26.02
5778	OG	SER	A	719	-67.345	12.944	86.446	1.00	28.60
5779	C	SER	A	719	-65.895	10.944	85.377	1.00	25.43
5780	O	SER	A	719	-66.030	11.113	84.188	1.00	24.62
5781	N	THR	A	720	-64.703	11.052	85.943	1.00	25.44
5782	CA	THR	A	720	-63.586	11.512	85.119	1.00	24.70
5783	CB	THR	A	720	-62.452	11.979	85.988	1.00	25.07
5784	OG1	THR	A	720	-62.117	10.936	86.921	1.00	25.60
5785	CG2	THR	A	720	-62.931	13.171	86.835	1.00	24.75
5786	C	THR	A	720	-63.076	10.478	84.137	1.00	24.15
5787	O	THR	A	720	-62.635	10.828	83.042	1.00	23.77
5788	N	ALA	A	721	-63.142	9.207	84.525	1.00	23.57
5789	CA	ALA	A	721	-62.688	8.130	83.653	1.00	23.35
5790	CB	ALA	A	721	-62.489	6.820	84.446	1.00	23.36
5791	C	ALA	A	721	-63.684	7.926	82.532	1.00	22.88
5792	O	ALA	A	721	-63.303	7.651	81.407	1.00	22.47
5793	N	HIS	A	722	-64.966	8.075	82.855	1.00	23.03
5794	CA	HIS	A	722	-66.029	7.955	81.872	1.00	22.95
5795	CB	HIS	A	722	-67.403	8.167	82.521	1.00	22.90
5796	CG	HIS	A	722	-68.525	8.292	81.527	1.00	23.87
5797	ND1	HIS	A	722	-68.953	7.237	80.747	1.00	24.64
5798	CE1	HIS	A	722	-69.931	7.639	79.956	1.00	24.39
5799	NE2	HIS	A	722	-70.157	8.917	80.197	1.00	26.13
5800	CD2	HIS	A	722	-69.291	9.351	81.174	1.00	23.85
5801	C	HIS	A	722	-65.794	9.003	80.796	1.00	23.22
5802	O	HIS	A	722	-65.777	8.709	79.609	1.00	22.74
5803	N	GLN	A	723	-65.563	10.238	81.221	1.00	23.31
5804	CA	GLN	A	723	-65.297	11.297	80.252	1.00	23.21

FIGURE 3 DJ

A	B	C	D	E	F	G	H	I	J
5805	CB	GLN	A	723	-65.205	12.637	80.984	1.00	23.00
5806	CG	GLN	A	723	-66.493	12.899	81.716	1.00	24.49
5807	CD	GLN	A	723	-66.503	14.184	82.467	1.00	26.80
5808	OE1	GLN	A	723	-66.444	15.263	81.862	1.00	31.36
5809	NE2	GLN	A	723	-66.617	14.096	83.786	1.00	26.57
5810	C	GLN	A	723	-64.028	11.036	79.477	1.00	22.62
5811	O	GLN	A	723	-63.955	11.294	78.274	1.00	23.70
5812	N	HIS	A	724	-63.014	10.541	80.168	1.00	21.60
5813	CA	HIS	A	724	-61.728	10.320	79.535	1.00	21.22
5814	CB	HIS	A	724	-60.666	9.958	80.594	1.00	20.83
5815	CG	HIS	A	724	-59.267	10.092	80.087	1.00	22.39
5816	ND1	HIS	A	724	-58.678	9.140	79.285	1.00	23.74
5817	CE1	HIS	A	724	-57.464	9.546	78.950	1.00	26.52
5818	NE2	HIS	A	724	-57.260	10.740	79.480	1.00	24.52
5819	CD2	HIS	A	724	-58.375	11.108	80.188	1.00	22.62
5820	C	HIS	A	724	-61.779	9.241	78.445	1.00	20.97
5821	O	HIS	A	724	-61.273	9.432	77.325	1.00	21.47
5822	N	ILE	A	725	-62.397	8.108	78.755	1.00	20.53
5823	CA	ILE	A	725	-62.431	7.025	77.783	1.00	20.56
5824	CB	ILE	A	725	-62.876	5.676	78.432	1.00	20.64
5825	CG1	ILE	A	725	-62.653	4.516	77.443	1.00	20.06
5826	CD1	ILE	A	725	-63.234	3.188	77.884	1.00	18.35
5827	CG2	ILE	A	725	-64.305	5.762	79.037	1.00	20.09
5828	C	ILE	A	725	-63.197	7.402	76.512	1.00	20.84
5829	O	ILE	A	725	-62.681	7.234	75.390	1.00	20.98
5830	N	TYR	A	726	-64.388	7.977	76.667	1.00	20.87
5831	CA	TYR	A	726	-65.165	8.387	75.492	1.00	21.00
5832	CB	TYR	A	726	-66.601	8.782	75.872	1.00	21.09
5833	CG	TYR	A	726	-67.449	7.551	76.078	1.00	19.03
5834	CD1	TYR	A	726	-67.720	7.098	77.347	1.00	18.31
5835	CE1	TYR	A	726	-68.452	5.972	77.540	1.00	20.53
5836	CZ	TYR	A	726	-68.928	5.264	76.465	1.00	19.61
5837	OH	TYR	A	726	-69.635	4.121	76.725	1.00	22.52
5838	CE2	TYR	A	726	-68.674	5.678	75.180	1.00	17.61
5839	CD2	TYR	A	726	-67.905	6.809	74.999	1.00	17.82
5840	C	TYR	A	726	-64.454	9.461	74.696	1.00	21.37
5841	O	TYR	A	726	-64.534	9.483	73.474	1.00	21.81
5842	N	THR	A	727	-63.740	10.344	75.384	1.00	21.83
5843	CA	THR	A	727	-62.950	11.345	74.681	1.00	22.39
5844	CB	THR	A	727	-62.358	12.384	75.669	1.00	23.07
5845	OG1	THR	A	727	-63.404	13.181	76.228	1.00	23.65
5846	CG2	THR	A	727	-61.481	13.403	74.937	1.00	21.85
5847	C	THR	A	727	-61.823	10.644	73.941	1.00	21.83
5848	O	THR	A	727	-61.610	10.899	72.768	1.00	21.98
5849	N	HIS	A	728	-61.088	9.762	74.623	1.00	22.21
5850	CA	HIS	A	728	-60.003	9.012	73.950	1.00	21.80
5851	CB	HIS	A	728	-59.321	8.026	74.910	1.00	21.58
5852	CG	HIS	A	728	-57.937	7.619	74.486	1.00	21.56
5853	ND1	HIS	A	728	-56.913	8.526	74.327	1.00	21.82
5854	CE1	HIS	A	728	-55.815	7.887	73.959	1.00	23.13
5855	NE2	HIS	A	728	-56.093	6.600	73.864	1.00	21.39

FIGURE 3 DK

A	B	C	D	E	F	G	H	I	J
5856	CD2	HIS	A	728	-57.409	6.403	74.194	1.00	20.39
5857	C	HIS	A	728	-60.517	8.229	72.749	1.00	21.57
5858	O	HIS	A	728	-59.893	8.228	71.709	1.00	22.29
5859	N	MET	A	729	-61.631	7.521	72.906	1.00	21.73
5860	CA	MET	A	729	-62.177	6.730	71.804	1.00	22.18
5861	CB	MET	A	729	-63.320	5.852	72.290	1.00	22.56
5862	CG	MET	A	729	-62.924	4.760	73.272	1.00	23.17
5863	SD	MET	A	729	-64.347	3.780	73.620	1.00	28.13
5864	CE	MET	A	729	-63.749	2.731	74.810	1.00	30.85
5865	C	MET	A	729	-62.676	7.610	70.649	1.00	22.60
5866	O	MET	A	729	-62.588	7.209	69.490	1.00	22.83
5867	N	SER	A	730	-63.195	8.802	70.948	1.00	22.21
5868	CA	SER	A	730	-63.641	9.683	69.861	1.00	22.68
5869	CB	SER	A	730	-64.395	10.912	70.390	1.00	22.47
5870	OG	SER	A	730	-65.460	10.524	71.251	1.00	22.04
5871	C	SER	A	730	-62.463	10.086	68.985	1.00	23.25
5872	O	SER	A	730	-62.549	10.039	67.757	1.00	22.85
5873	N	HIS	A	731	-61.348	10.449	69.615	1.00	24.04
5874	CA	HIS	A	731	-60.145	10.818	68.863	1.00	24.99
5875	CB	HIS	A	731	-58.973	11.158	69.803	1.00	25.06
5876	CG	HIS	A	731	-59.135	12.454	70.530	1.00	27.51
5877	ND1	HIS	A	731	-59.577	13.600	69.910	1.00	28.84
5878	CE1	HIS	A	731	-59.617	14.585	70.791	1.00	30.70
5879	NE2	HIS	A	731	-59.205	14.122	71.957	1.00	29.03
5880	CD2	HIS	A	731	-58.894	12.792	71.821	1.00	28.48
5881	C	HIS	A	731	-59.687	9.694	67.952	1.00	24.46
5882	O	HIS	A	731	-59.246	9.921	66.828	1.00	24.53
5883	N	PHE	A	732	-59.754	8.474	68.456	1.00	24.56
5884	CA	PHE	A	732	-59.244	7.331	67.694	1.00	23.88
5885	CB	PHE	A	732	-59.145	6.108	68.612	1.00	23.14
5886	CG	PHE	A	732	-58.834	4.830	67.898	1.00	22.25
5887	CD1	PHE	A	732	-57.509	4.452	67.657	1.00	21.45
5888	CE1	PHE	A	732	-57.228	3.245	67.006	1.00	21.94
5889	CZ	PHE	A	732	-58.271	2.414	66.588	1.00	18.68
5890	CE2	PHE	A	732	-59.583	2.784	66.838	1.00	20.26
5891	CD2	PHE	A	732	-59.861	3.985	67.481	1.00	18.97
5892	C	PHE	A	732	-60.189	7.086	66.546	1.00	24.38
5893	O	PHE	A	732	-59.767	6.846	65.422	1.00	23.91
5894	N	ILE	A	733	-61.480	7.172	66.845	1.00	25.50
5895	CA	ILE	A	733	-62.511	6.993	65.840	1.00	27.16
5896	CB	ILE	A	733	-63.917	7.023	66.460	1.00	26.69
5897	CG1	ILE	A	733	-64.185	5.711	67.187	1.00	28.91
5898	CD1	ILE	A	733	-64.089	4.489	66.265	1.00	27.10
5899	CG2	ILE	A	733	-64.948	7.137	65.370	1.00	28.56
5900	C	ILE	A	733	-62.388	8.018	64.719	1.00	27.71
5901	O	ILE	A	733	-62.356	7.637	63.546	1.00	27.57
5902	N	LYS	A	734	-62.306	9.298	65.054	1.00	28.63
5903	CA	LYS	A	734	-62.162	10.276	63.981	1.00	30.59
5904	CB	LYS	A	734	-62.542	11.695	64.392	1.00	31.04
5905	CG	LYS	A	734	-62.810	11.899	65.853	1.00	32.63
5906	CD	LYS	A	734	-63.776	13.051	66.071	1.00	34.40



FIGURE 3 DL

A	B	C	D	E	F	G	H	I	J
5907	CE	LYS	A	734	-63.253	14.336	65.441	1.00	36.19
5908	NZ	LYS	A	734	-64.229	15.456	65.549	1.00	38.15
5909	C	LYS	A	734	-60.805	10.206	63.284	1.00	31.10
5910	O	LYS	A	734	-60.723	10.519	62.107	1.00	31.08
5911	N	GLN	A	735	-59.755	9.775	63.982	1.00	31.91
5912	CA	GLN	A	735	-58.454	9.590	63.332	1.00	33.34
5913	CB	GLN	A	735	-57.369	9.179	64.333	1.00	33.56
5914	CG	GLN	A	735	-56.025	8.750	63.691	1.00	37.28
5915	CD	GLN	A	735	-56.024	7.323	63.086	1.00	42.41
5916	OE1	GLN	A	735	-55.765	7.153	61.885	1.00	44.60
5917	NE2	GLN	A	735	-56.289	6.296	63.918	1.00	43.33
5918	C	GLN	A	735	-58.567	8.521	62.252	1.00	33.22
5919	O	GLN	A	735	-58.120	8.721	61.128	1.00	33.15
5920	N	CYS	A	736	-59.170	7.389	62.610	1.00	33.22
5921	CA	CYS	A	736	-59.358	6.263	61.693	1.00	33.79
5922	CB	CYS	A	736	-59.968	5.072	62.462	1.00	33.73
5923	SG	CYS	A	736	-60.727	3.713	61.519	1.00	37.10
5924	C	CYS	A	736	-60.219	6.635	60.476	1.00	33.58
5925	O	CYS	A	736	-59.961	6.173	59.368	1.00	33.62
5926	N	PHE	A	737	-61.224	7.477	60.704	1.00	33.49
5927	CA	PHE	A	737	-62.175	7.913	59.679	1.00	33.66
5928	CB	PHE	A	737	-63.575	8.112	60.294	1.00	32.87
5929	CG	PHE	A	737	-64.301	6.823	60.608	1.00	31.36
5930	CD1	PHE	A	737	-63.816	5.602	60.159	1.00	30.51
5931	CE1	PHE	A	737	-64.499	4.414	60.429	1.00	28.51
5932	CZ	PHE	A	737	-65.662	4.441	61.166	1.00	27.07
5933	CE2	PHE	A	737	-66.154	5.651	61.625	1.00	28.45
5934	CD2	PHE	A	737	-65.477	6.834	61.340	1.00	29.14
5935	C	PHE	A	737	-61.737	9.201	58.963	1.00	34.35
5936	O	PHE	A	737	-62.460	9.741	58.130	1.00	33.54
5937	N	SER	A	738	-60.544	9.685	59.283	1.00	35.95
5938	CA	SER	A	738	-60.044	10.916	58.672	1.00	37.76
5939	CB	SER	A	738	-59.792	10.712	57.171	1.00	37.83
5940	OG	SER	A	738	-58.712	9.830	56.951	1.00	38.28
5941	C	SER	A	738	-61.015	12.086	58.894	1.00	38.68
5942	O	SER	A	738	-61.259	12.878	57.988	1.00	38.51
5943	N	LEU	A	739	-61.568	12.171	60.100	1.00	40.18
5944	CA	LEU	A	739	-62.470	13.246	60.482	1.00	41.75
5945	CB	LEU	A	739	-63.629	12.697	61.306	1.00	41.38
5946	CG	LEU	A	739	-64.564	11.738	60.567	1.00	40.93
5947	CD1	LEU	A	739	-65.640	11.206	61.492	1.00	37.09
5948	CD2	LEU	A	739	-65.168	12.452	59.354	1.00	41.52
5949	C	LEU	A	739	-61.706	14.237	61.331	1.00	43.20
5950	O	LEU	A	739	-61.526	14.013	62.518	1.00	44.19
5951	N	PRO	A	740	-61.229	15.315	60.726	1.00	44.56
5952	CA	PRO	A	740	-60.459	16.341	61.441	1.00	45.43
5953	CB	PRO	A	740	-59.950	17.229	60.306	1.00	45.59
5954	CG	PRO	A	740	-60.046	16.377	59.111	1.00	45.51
5955	CD	PRO	A	740	-61.342	15.620	59.293	1.00	44.81
5956	C	PRO	A	740	-61.297	17.178	62.414	1.00	46.06
5957	O	PRO	A	740	-62.340	16.718	62.884	1.00	46.86

FIGURE 3 DM

A	B	C	D	E	F	G	H	I	J
5958	O7	NAG	A2311		-101.706	-14.580	110.320	1.00	67.11
5959	C7	NAG	A2311		-100.699	-13.892	110.433	1.00	65.56
5960	C8	NAG	A2311		-100.768	-12.440	110.821	1.00	66.13
5961	N2	NAG	A2311		-99.477	-14.405	110.302	1.00	63.69
5962	C2	NAG	A2311		-99.303	-15.797	109.931	1.00	62.14
5963	C1	NAG	A2311		-98.045	-15.994	109.103	1.00	59.33
5964	C3	NAG	A2311		-99.244	-16.705	111.144	1.00	62.19
5965	O3	NAG	A2311		-100.505	-16.634	111.819	1.00	63.22
5966	C4	NAG	A2311		-99.012	-18.143	110.686	1.00	61.71
5967	O4	NAG	A2311		-98.700	-18.975	111.811	1.00	61.69
5968	C5	NAG	A2311		-97.897	-18.254	109.645	1.00	61.35
5969	O5	NAG	A2311		-98.061	-17.312	108.593	1.00	60.20
5970	C6	NAG	A2311		-97.878	-19.638	109.019	1.00	61.97
5971	O6	NAG	A2311		-96.587	-20.208	109.275	1.00	62.68
5972	O7	NAG	A2411		-69.302	-25.885	106.392	1.00	54.80
5973	C7	NAG	A2411		-68.758	-24.803	106.510	1.00	53.76
5974	C8	NAG	A2411		-69.299	-23.706	107.377	1.00	53.91
5975	N2	NAG	A2411		-67.596	-24.564	105.931	1.00	52.61
5976	C2	NAG	A2411		-67.039	-25.609	105.112	1.00	52.99
5977	C1	NAG	A2411		-66.605	-25.068	103.764	1.00	47.58
5978	C3	NAG	A2411		-65.881	-26.265	105.866	1.00	54.83
5979	O3	NAG	A2411		-66.372	-26.917	107.043	1.00	56.64
5980	C4	NAG	A2411		-65.217	-27.301	104.980	1.00	54.99
5981	O4	NAG	A2411		-64.057	-27.834	105.639	1.00	59.91
5982	C5	NAG	A2411		-64.856	-26.648	103.653	1.00	53.51
5983	O5	NAG	A2411		-66.038	-26.142	103.026	1.00	52.24
5984	C6	NAG	A2411		-64.212	-27.654	102.717	1.00	52.86
5985	O6	NAG	A2411		-65.229	-28.130	101.831	1.00	52.85
5986	O7	NAG	A2412		-60.346	-27.486	103.509	1.00	73.72
5987	C7	NAG	A2412		-60.841	-27.680	104.609	1.00	73.68
5988	C8	NAG	A2412		-60.668	-26.700	105.737	1.00	74.25
5989	N2	NAG	A2412		-61.635	-28.724	104.846	1.00	72.89
5990	C2	NAG	A2412		-62.240	-28.940	106.145	1.00	72.83
5991	C1	NAG	A2412		-63.747	-29.127	106.017	1.00	69.76
5992	C3	NAG	A2412		-61.599	-30.144	106.833	1.00	73.48
5993	O3	NAG	A2412		-60.208	-29.879	107.077	1.00	74.07
5994	C4	NAG	A2412		-62.303	-30.427	108.156	1.00	73.50
5995	O4	NAG	A2412		-61.792	-31.648	108.718	1.00	74.51
5996	C5	NAG	A2412		-63.819	-30.499	107.969	1.00	72.95
5997	O5	NAG	A2412		-64.303	-29.319	107.318	1.00	72.24
5998	C6	NAG	A2412		-64.534	-30.638	109.310	1.00	73.39
5999	O6	NAG	A2412		-64.246	-29.499	110.139	1.00	73.37
6000	O7	NAG	A2931		-75.747	-20.902	123.574	1.00	68.40
6001	C7	NAG	A2931		-75.833	-19.694	123.389	1.00	68.47
6002	C8	NAG	A2931		-76.643	-18.791	124.278	1.00	69.27
6003	N2	NAG	A2931		-75.142	-19.086	122.428	1.00	66.82
6004	C2	NAG	A2931		-74.315	-19.887	121.551	1.00	65.47
6005	C1	NAG	A2931		-74.614	-19.648	120.071	1.00	62.57
6006	C3	NAG	A2931		-72.861	-19.647	121.941	1.00	65.13
6007	O3	NAG	A2931		-72.643	-20.270	123.214	1.00	66.03
6008	C4	NAG	A2931		-71.872	-20.246	120.956	1.00	65.18

FIGURE 3 DN

A	B	C	D	E	F	G	H	I	J
6009	O4	NAG	A2931		-70.586	-19.657	121.232	1.00	64.70
6010	C5	NAG	A2931		-72.320	-20.032	119.502	1.00	64.87
6011	O5	NAG	A2931		-73.686	-20.431	119.318	1.00	63.71
6012	C6	NAG	A2931		-71.412	-20.759	118.501	1.00	65.29
6013	O6	NAG	A2931		-71.670	-22.169	118.463	1.00	66.16
6014	O7	NAG	A3331		-79.456	-32.271	76.813	1.00	56.81
6015	C7	NAG	A3331		-79.475	-32.704	77.949	1.00	55.21
6016	C8	NAG	A3331		-80.758	-33.009	78.655	1.00	56.21
6017	N2	NAG	A3331		-78.353	-32.997	78.595	1.00	54.94
6018	C2	NAG	A3331		-77.071	-32.724	77.972	1.00	53.94
6019	C1	NAG	A3331		-76.352	-31.662	78.803	1.00	50.83
6020	C3	NAG	A3331		-76.224	-33.980	77.825	1.00	54.42
6021	O3	NAG	A3331		-76.891	-34.893	76.937	1.00	54.46
6022	C4	NAG	A3331		-74.846	-33.570	77.300	1.00	55.36
6023	O4	NAG	A3331		-73.959	-34.698	77.202	1.00	57.49
6024	C5	NAG	A3331		-74.246	-32.498	78.211	1.00	55.58
6025	O5	NAG	A3331		-75.095	-31.348	78.212	1.00	54.08
6026	C6	NAG	A3331		-72.862	-32.063	77.761	1.00	56.37
6027	O6	NAG	A3331		-73.020	-31.081	76.723	1.00	57.36
6028	N	HIS	B	9	-26.838	6.528	39.826	1.00	51.46
6029	CA	HIS	B	9	-26.599	6.867	41.263	1.00	51.24
6030	CB	HIS	B	9	-26.976	5.700	42.165	1.00	51.44
6031	CG	HIS	B	9	-26.270	4.422	41.834	1.00	51.51
6032	ND1	HIS	B	9	-25.316	3.866	42.658	1.00	50.18
6033	CE1	HIS	B	9	-24.880	2.738	42.124	1.00	50.86
6034	NE2	HIS	B	9	-25.517	2.541	40.984	1.00	51.05
6035	CD2	HIS	B	9	-26.391	3.581	40.778	1.00	52.22
6036	C	HIS	B	9	-25.161	7.276	41.507	1.00	50.92
6037	O	HIS	B	9	-24.848	7.893	42.525	1.00	50.67
6038	N	HIS	B	10	-24.284	6.929	40.568	1.00	50.91
6039	CA	HIS	B	10	-22.879	7.326	40.655	1.00	50.79
6040	CB	HIS	B	10	-22.735	8.812	40.314	1.00	51.37
6041	CG	HIS	B	10	-23.356	9.188	39.001	1.00	53.62
6042	ND1	HIS	B	10	-22.705	9.950	38.055	1.00	55.54
6043	CE1	HIS	B	10	-23.489	10.111	37.003	1.00	56.51
6044	NE2	HIS	B	10	-24.624	9.476	37.231	1.00	57.01
6045	CD2	HIS	B	10	-24.568	8.895	38.475	1.00	55.21
6046	C	HIS	B	10	-22.299	7.031	42.041	1.00	49.97
6047	O	HIS	B	10	-21.543	7.823	42.590	1.00	50.21
6048	N	HIS	B	11	-22.704	5.902	42.612	1.00	48.73
6049	CA	HIS	B	11	-22.197	5.443	43.898	1.00	47.84
6050	CB	HIS	B	11	-20.757	4.977	43.751	1.00	47.49
6051	CG	HIS	B	11	-20.599	3.895	42.736	1.00	46.24
6052	ND1	HIS	B	11	-20.982	2.596	42.978	1.00	44.69
6053	CE1	HIS	B	11	-20.735	1.862	41.907	1.00	45.47
6054	NE2	HIS	B	11	-20.227	2.645	40.973	1.00	45.22
6055	CD2	HIS	B	11	-20.141	3.924	41.463	1.00	46.06
6056	C	HIS	B	11	-22.359	6.382	45.085	1.00	47.55
6057	O	HIS	B	11	-21.589	6.341	46.048	1.00	47.46
6058	N	HIS	B	12	-23.371	7.229	45.028	1.00	47.24
6059	CA	HIS	B	12	-23.628	8.090	46.164	1.00	47.40

FIGURE 3 DO

A	B	C	D	E	F	G	H	I	J
6060	CB	HIS	B	12	-24.450	9.308	45.755	1.00	47.98
6061	CG	HIS	B	12	-23.691	10.278	44.912	1.00	49.81
6062	ND1	HIS	B	12	-22.581	10.952	45.375	1.00	51.77
6063	CE1	HIS	B	12	-22.118	11.738	44.418	1.00	53.30
6064	NE2	HIS	B	12	-22.886	11.596	43.352	1.00	53.18
6065	CD2	HIS	B	12	-23.876	10.685	43.634	1.00	52.05
6066	C	HIS	B	12	-24.335	7.308	47.261	1.00	46.64
6067	O	HIS	B	12	-25.076	6.350	46.999	1.00	46.17
6068	N	SER	B	13	-24.068	7.703	48.494	1.00	45.74
6069	CA	SER	B	13	-24.696	7.067	49.621	1.00	45.17
6070	CB	SER	B	13	-24.011	7.502	50.918	1.00	45.34
6071	OG	SER	B	13	-22.627	7.208	50.873	1.00	44.84
6072	C	SER	B	13	-26.154	7.486	49.610	1.00	44.76
6073	O	SER	B	13	-26.474	8.666	49.801	1.00	44.75
6074	N	ARG	B	14	-27.047	6.538	49.349	1.00	43.99
6075	CA	ARG	B	14	-28.455	6.893	49.353	1.00	43.48
6076	CB	ARG	B	14	-29.081	6.839	47.946	1.00	44.34
6077	CG	ARG	B	14	-29.532	5.487	47.438	1.00	46.74
6078	CD	ARG	B	14	-28.437	4.724	46.726	1.00	50.53
6079	NE	ARG	B	14	-28.877	3.996	45.535	1.00	52.35
6080	CZ	ARG	B	14	-28.334	2.846	45.150	1.00	54.53
6081	NH1	ARG	B	14	-27.358	2.316	45.879	1.00	56.16
6082	NH2	ARG	B	14	-28.753	2.220	44.054	1.00	53.87
6083	C	ARG	B	14	-29.258	6.157	50.426	1.00	42.02
6084	O	ARG	B	14	-30.411	6.493	50.684	1.00	42.18
6085	N	LYS	B	15	-28.618	5.183	51.071	1.00	40.01
6086	CA	LYS	B	15	-29.213	4.452	52.181	1.00	37.85
6087	CB	LYS	B	15	-28.399	3.193	52.484	1.00	38.37
6088	CG	LYS	B	15	-28.765	1.968	51.687	1.00	38.55
6089	CD	LYS	B	15	-27.853	0.820	52.068	1.00	38.41
6090	CE	LYS	B	15	-26.649	0.727	51.162	1.00	37.94
6091	NZ	LYS	B	15	-25.836	-0.495	51.508	1.00	38.06
6092	C	LYS	B	15	-29.172	5.281	53.445	1.00	36.28
6093	O	LYS	B	15	-28.301	6.137	53.613	1.00	35.80
6094	N	THR	B	16	-30.105	5.005	54.349	1.00	34.29
6095	CA	THR	B	16	-30.074	5.617	55.665	1.00	32.39
6096	CB	THR	B	16	-31.240	6.588	55.881	1.00	32.78
6097	OG1	THR	B	16	-32.480	5.870	55.918	1.00	32.81
6098	CG2	THR	B	16	-31.389	7.522	54.692	1.00	32.16
6099	C	THR	B	16	-30.131	4.493	56.671	1.00	31.47
6100	O	THR	B	16	-30.352	3.335	56.315	1.00	30.96
6101	N	TYR	B	17	-29.889	4.823	57.927	1.00	30.27
6102	CA	TYR	B	17	-29.969	3.826	58.982	1.00	29.53
6103	CB	TYR	B	17	-29.076	4.257	60.137	1.00	28.58
6104	CG	TYR	B	17	-28.988	3.271	61.260	1.00	26.98
6105	CD1	TYR	B	17	-28.046	2.261	61.238	1.00	25.97
6106	CE1	TYR	B	17	-27.938	1.358	62.275	1.00	25.10
6107	CZ	TYR	B	17	-28.788	1.473	63.364	1.00	26.59
6108	OH	TYR	B	17	-28.689	0.564	64.394	1.00	25.76
6109	CE2	TYR	B	17	-29.741	2.474	63.411	1.00	25.68
6110	CD2	TYR	B	17	-29.835	3.364	62.366	1.00	26.27

FIGURE 3 DP

A	B	C	D	E	F	G	H	I	J
6111	C	TYR	B	17	-31.433	3.772	59.419	1.00	29.18
6112	O	TYR	B	17	-31.931	4.715	60.021	1.00	29.31
6113	N	THR	B	18	-32.127	2.681	59.128	1.00	28.83
6114	CA	THR	B	18	-33.577	2.650	59.393	1.00	28.33
6115	CB	THR	B	18	-34.283	1.890	58.301	1.00	28.04
6116	OG1	THR	B	18	-33.843	0.532	58.361	1.00	27.49
6117	CG2	THR	B	18	-33.839	2.392	56.890	1.00	27.67
6118	C	THR	B	18	-34.015	2.041	60.726	1.00	28.42
6119	O	THR	B	18	-33.225	1.418	61.440	1.00	28.15
6120	N	LEU	B	19	-35.296	2.214	61.032	1.00	28.13
6121	CA	LEU	B	19	-35.874	1.645	62.235	1.00	28.62
6122	CB	LEU	B	19	-37.370	1.958	62.310	1.00	28.69
6123	CG	LEU	B	19	-38.090	1.439	63.555	1.00	30.29
6124	CD1	LEU	B	19	-37.459	2.049	64.794	1.00	30.06
6125	CD2	LEU	B	19	-39.565	1.788	63.486	1.00	29.50
6126	C	LEU	B	19	-35.626	0.144	62.259	1.00	28.23
6127	O	LEU	B	19	-35.243	-0.409	63.287	1.00	28.68
6128	N	THR	B	20	-35.826	-0.501	61.114	1.00	28.11
6129	CA	THR	B	20	-35.579	-1.926	60.970	1.00	28.80
6130	CB	THR	B	20	-36.145	-2.409	59.644	1.00	29.13
6131	OG1	THR	B	20	-37.513	-1.991	59.557	1.00	33.42
6132	CG2	THR	B	20	-36.249	-3.899	59.638	1.00	28.42
6133	C	THR	B	20	-34.089	-2.274	61.057	1.00	28.68
6134	O	THR	B	20	-33.731	-3.372	61.494	1.00	28.68
6135	N	ASP	B	21	-33.215	-1.368	60.623	1.00	27.84
6136	CA	ASP	B	21	-31.793	-1.633	60.803	1.00	27.96
6137	CB	ASP	B	21	-30.910	-0.552	60.163	1.00	27.48
6138	CG	ASP	B	21	-30.980	-0.578	58.658	1.00	27.90
6139	OD1	ASP	B	21	-31.234	-1.661	58.102	1.00	29.99
6140	OD2	ASP	B	21	-30.850	0.434	57.948	1.00	27.64
6141	C	ASP	B	21	-31.500	-1.746	62.292	1.00	27.47
6142	O	ASP	B	21	-30.852	-2.681	62.730	1.00	27.65
6143	N	TYR	B	22	-31.990	-0.786	63.066	1.00	27.56
6144	CA	TYR	B	22	-31.798	-0.786	64.511	1.00	27.07
6145	CB	TYR	B	22	-32.387	0.496	65.095	1.00	27.26
6146	CG	TYR	B	22	-32.479	0.536	66.603	1.00	25.76
6147	CD1	TYR	B	22	-31.354	0.327	67.390	1.00	25.07
6148	CE1	TYR	B	22	-31.437	0.361	68.771	1.00	26.02
6149	CZ	TYR	B	22	-32.658	0.625	69.376	1.00	26.47
6150	OH	TYR	B	22	-32.730	0.652	70.740	1.00	28.72
6151	CE2	TYR	B	22	-33.791	0.833	68.622	1.00	24.53
6152	CD2	TYR	B	22	-33.698	0.788	67.238	1.00	24.72
6153	C	TYR	B	22	-32.462	-1.990	65.152	1.00	27.28
6154	O	TYR	B	22	-31.860	-2.704	65.952	1.00	26.36
6155	N	LEU	B	23	-33.717	-2.218	64.787	1.00	28.09
6156	CA	LEU	B	23	-34.463	-3.332	65.374	1.00	28.86
6157	CB	LEU	B	23	-35.959	-3.162	65.148	1.00	28.70
6158	CG	LEU	B	23	-36.527	-1.946	65.867	1.00	28.01
6159	CD1	LEU	B	23	-38.043	-1.974	65.769	1.00	27.16
6160	CD2	LEU	B	23	-36.049	-1.928	67.336	1.00	27.83
6161	C	LEU	B	23	-33.989	-4.725	64.962	1.00	29.70

FIGURE 3 DQ

A	B	C	D	E	F	G	H	I	J
6162	O	LEU	B	23	-34.043	-5.656	65.771	1.00	29.97
6163	N	LYS	B	24	-33.506	-4.899	63.736	1.00	31.19
6164	CA	LYS	B	24	-33.044	-6.248	63.338	1.00	33.19
6165	CB	LYS	B	24	-33.556	-6.624	61.946	1.00	32.67
6166	CG	LYS	B	24	-35.050	-6.558	61.801	1.00	34.40
6167	CD	LYS	B	24	-35.750	-7.527	62.748	1.00	36.99
6168	CE	LYS	B	24	-37.226	-7.660	62.398	1.00	38.20
6169	NZ	LYS	B	24	-37.985	-8.390	63.451	1.00	39.33
6170	C	LYS	B	24	-31.518	-6.371	63.417	1.00	33.92
6171	O	LYS	B	24	-30.911	-7.210	62.753	1.00	34.63
6172	N	ASN	B	25	-30.921	-5.515	64.243	1.00	35.51
6173	CA	ASN	B	25	-29.473	-5.455	64.485	1.00	37.54
6174	CB	ASN	B	25	-29.083	-6.367	65.658	1.00	37.71
6175	CG	ASN	B	25	-28.007	-5.750	66.536	1.00	41.32
6176	OD1	ASN	B	25	-26.832	-5.676	66.146	1.00	44.42
6177	ND2	ASN	B	25	-28.400	-5.287	67.726	1.00	42.73
6178	C	ASN	B	25	-28.577	-5.684	63.250	1.00	37.43
6179	O	ASN	B	25	-27.533	-6.328	63.326	1.00	38.79
6180	N	THR	B	26	-29.007	-5.106	62.133	1.00	37.35
6181	CA	THR	B	26	-28.351	-5.149	60.825	1.00	37.43
6182	CB	THR	B	26	-29.128	-4.228	59.856	1.00	37.53
6183	OG1	THR	B	26	-30.456	-4.736	59.653	1.00	38.93
6184	CG2	THR	B	26	-28.513	-4.276	58.461	1.00	36.89
6185	C	THR	B	26	-26.877	-4.710	60.783	1.00	37.60
6186	O	THR	B	26	-26.050	-5.306	60.086	1.00	37.23
6187	N	TYR	B	27	-26.571	-3.625	61.480	1.00	37.59
6188	CA	TYR	B	27	-25.217	-3.115	61.540	1.00	37.80
6189	CB	TYR	B	27	-25.188	-1.630	61.243	1.00	37.38
6190	CG	TYR	B	27	-25.714	-1.301	59.872	1.00	37.50
6191	CD1	TYR	B	27	-24.993	-1.628	58.730	1.00	38.34
6192	CE1	TYR	B	27	-25.484	-1.313	57.460	1.00	38.30
6193	CZ	TYR	B	27	-26.711	-0.680	57.342	1.00	37.34
6194	OH	TYR	B	27	-27.225	-0.356	56.103	1.00	36.98
6195	CE2	TYR	B	27	-27.433	-0.359	58.471	1.00	36.73
6196	CD2	TYR	B	27	-26.941	-0.673	59.714	1.00	35.88
6197	C	TYR	B	27	-24.732	-3.405	62.929	1.00	38.00
6198	O	TYR	B	27	-25.262	-2.894	63.916	1.00	37.90
6199	N	ARG	B	28	-23.715	-4.246	62.998	1.00	38.99
6200	CA	ARG	B	28	-23.300	-4.776	64.275	1.00	39.79
6201	CB	ARG	B	28	-23.452	-6.296	64.269	1.00	40.10
6202	CG	ARG	B	28	-23.869	-6.872	65.611	1.00	43.94
6203	CD	ARG	B	28	-24.428	-8.312	65.544	1.00	47.66
6204	NE	ARG	B	28	-25.551	-8.447	64.616	1.00	50.54
6205	CZ	ARG	B	28	-26.333	-9.527	64.544	1.00	52.62
6206	NH1	ARG	B	28	-26.131	-10.561	65.354	1.00	53.53
6207	NH2	ARG	B	28	-27.323	-9.576	63.665	1.00	52.85
6208	C	ARG	B	28	-21.906	-4.396	64.721	1.00	39.43
6209	O	ARG	B	28	-20.924	-4.536	63.991	1.00	39.12
6210	N	LEU	B	29	-21.856	-3.924	65.957	1.00	39.68
6211	CA	LEU	B	29	-20.637	-3.556	66.620	1.00	39.80
6212	CB	LEU	B	29	-21.008	-2.766	67.868	1.00	39.92

FIGURE 3 DR

A	B	C	D	E	F	G	H	I	J
6213	CG	LEU	B	29	-20.875	-1.249	67.910	1.00	40.58
6214	CD1	LEU	B	29	-21.683	-0.732	69.085	1.00	40.56
6215	CD2	LEU	B	29	-21.303	-0.585	66.623	1.00	40.39
6216	C	LEU	B	29	-19.945	-4.842	67.035	1.00	39.84
6217	O	LEU	B	29	-20.483	-5.610	67.826	1.00	39.65
6218	N	LYS	B	30	-18.768	-5.108	66.495	1.00	40.26
6219	CA	LYS	B	30	-18.047	-6.297	66.931	1.00	40.77
6220	CB	LYS	B	30	-17.055	-6.779	65.885	1.00	41.21
6221	CG	LYS	B	30	-17.720	-7.358	64.650	1.00	43.51
6222	CD	LYS	B	30	-16.815	-8.350	63.947	1.00	45.58
6223	CE	LYS	B	30	-17.202	-9.800	64.271	1.00	48.08
6224	NZ	LYS	B	30	-17.225	-10.113	65.734	1.00	48.56
6225	C	LYS	B	30	-17.347	-5.997	68.237	1.00	40.39
6226	O	LYS	B	30	-16.761	-4.937	68.412	1.00	40.34
6227	N	LEU	B	31	-17.461	-6.920	69.174	1.00	40.68
6228	CA	LEU	B	31	-16.810	-6.774	70.456	1.00	41.26
6229	CB	LEU	B	31	-17.755	-7.188	71.583	1.00	41.72
6230	CG	LEU	B	31	-18.821	-6.197	72.049	1.00	43.90
6231	CD1	LEU	B	31	-19.901	-5.995	70.972	1.00	45.00
6232	CD2	LEU	B	31	-19.443	-6.679	73.365	1.00	44.09
6233	C	LEU	B	31	-15.596	-7.684	70.477	1.00	40.83
6234	O	LEU	B	31	-15.402	-8.491	69.568	1.00	40.77
6235	N	TYR	B	32	-14.762	-7.524	71.494	1.00	40.42
6236	CA	TYR	B	32	-13.677	-8.456	71.722	1.00	40.52
6237	CB	TYR	B	32	-12.325	-7.966	71.205	1.00	40.33
6238	CG	TYR	B	32	-11.335	-9.111	71.097	1.00	40.26
6239	CD1	TYR	B	32	-10.746	-9.656	72.230	1.00	39.09
6240	CE1	TYR	B	32	-9.857	-10.715	72.138	1.00	39.65
6241	CZ	TYR	B	32	-9.555	-11.253	70.901	1.00	40.53
6242	OH	TYR	B	32	-8.659	-12.305	70.802	1.00	41.54
6243	CE2	TYR	B	32	-10.131	-10.733	69.762	1.00	40.34
6244	CD2	TYR	B	32	-11.024	-9.676	69.863	1.00	40.59
6245	C	TYR	B	32	-13.643	-8.648	73.215	1.00	40.78
6246	O	TYR	B	32	-12.922	-7.954	73.935	1.00	40.51
6247	N	SER	B	33	-14.447	-9.590	73.675	1.00	41.07
6248	CA	SER	B	33	-14.612	-9.810	75.093	1.00	42.02
6249	CB	SER	B	33	-16.088	-10.092	75.391	1.00	42.31
6250	OG	SER	B	33	-16.253	-10.612	76.698	1.00	44.32
6251	C	SER	B	33	-13.725	-10.935	75.582	1.00	42.28
6252	O	SER	B	33	-13.885	-12.086	75.192	1.00	43.13
6253	N	LEU	B	34	-12.774	-10.607	76.441	1.00	42.35
6254	CA	LEU	B	34	-11.872	-11.626	76.933	1.00	42.22
6255	CB	LEU	B	34	-10.449	-11.343	76.456	1.00	41.83
6256	CG	LEU	B	34	-9.857	-9.991	76.829	1.00	40.59
6257	CD1	LEU	B	34	-9.349	-10.059	78.253	1.00	38.90
6258	CD2	LEU	B	34	-8.755	-9.608	75.849	1.00	38.10
6259	C	LEU	B	34	-11.913	-11.776	78.444	1.00	42.66
6260	O	LEU	B	34	-12.320	-10.864	79.166	1.00	42.16
6261	N	ARG	B	35	-11.510	-12.956	78.904	1.00	43.14
6262	CA	ARG	B	35	-11.381	-13.223	80.320	1.00	43.97
6263	CB	ARG	B	35	-12.289	-14.372	80.748	1.00	44.41

FIGURE 3 DS

A	B	C	D	E	F	G	H	I	J
6264	CG	ARG	B	35	-13.748	-14.178	80.430	1.00	46.96
6265	CD	ARG	B	35	-14.457	-15.498	80.199	1.00	51.91
6266	NE	ARG	B	35	-15.907	-15.361	80.144	1.00	54.36
6267	CZ	ARG	B	35	-16.737	-16.049	80.915	1.00	55.95
6268	NH1	ARG	B	35	-16.254	-16.910	81.803	1.00	55.92
6269	NH2	ARG	B	35	-18.050	-15.879	80.796	1.00	56.97
6270	C	ARG	B	35	-9.937	-13.613	80.582	1.00	43.91
6271	O	ARG	B	35	-9.476	-14.661	80.113	1.00	43.73
6272	N	TRP	B	36	-9.219	-12.775	81.314	1.00	43.77
6273	CA	TRP	B	36	-7.841	-13.093	81.648	1.00	44.42
6274	CB	TRP	B	36	-7.142	-11.895	82.283	1.00	43.77
6275	CG	TRP	B	36	-6.864	-10.747	81.372	1.00	41.88
6276	CD1	TRP	B	36	-7.506	-9.547	81.356	1.00	41.08
6277	NE1	TRP	B	36	-6.960	-8.727	80.399	1.00	37.93
6278	CE2	TRP	B	36	-5.935	-9.393	79.785	1.00	38.72
6279	CD2	TRP	B	36	-5.845	-10.665	80.377	1.00	39.63
6280	CE3	TRP	B	36	-4.859	-11.545	79.920	1.00	40.34
6281	CZ3	TRP	B	36	-4.024	-11.143	78.910	1.00	38.87
6282	CH2	TRP	B	36	-4.144	-9.873	78.338	1.00	40.20
6283	CZ2	TRP	B	36	-5.085	-8.981	78.765	1.00	38.43
6284	C	TRP	B	36	-7.843	-14.246	82.647	1.00	45.28
6285	O	TRP	B	36	-8.602	-14.223	83.605	1.00	45.67
6286	N	ILE	B	37	-7.006	-15.253	82.433	1.00	46.12
6287	CA	ILE	B	37	-6.920	-16.341	83.399	1.00	47.03
6288	CB	ILE	B	37	-7.174	-17.714	82.741	1.00	47.02
6289	CG1	ILE	B	37	-6.279	-17.919	81.518	1.00	47.30
6290	CD1	ILE	B	37	-4.968	-18.566	81.840	1.00	48.08
6291	CG2	ILE	B	37	-8.607	-17.844	82.357	1.00	46.71
6292	C	ILE	B	37	-5.583	-16.314	84.128	1.00	47.70
6293	O	ILE	B	37	-5.393	-17.006	85.129	1.00	47.41
6294	N	SER	B	38	-4.668	-15.490	83.630	1.00	48.57
6295	CA	SER	B	38	-3.357	-15.353	84.246	1.00	49.53
6296	CB	SER	B	38	-2.418	-16.449	83.753	1.00	49.32
6297	OG	SER	B	38	-1.954	-16.147	82.451	1.00	48.71
6298	C	SER	B	38	-2.758	-14.007	83.886	1.00	50.44
6299	O	SER	B	38	-3.457	-13.106	83.428	1.00	51.01
6300	N	ASP	B	39	-1.452	-13.879	84.066	1.00	50.86
6301	CA	ASP	B	39	-0.784	-12.632	83.749	1.00	51.46
6302	CB	ASP	B	39	0.382	-12.396	84.705	1.00	51.49
6303	CG	ASP	B	39	0.913	-10.989	84.628	1.00	52.93
6304	OD1	ASP	B	39	2.156	-10.826	84.682	1.00	54.27
6305	OD2	ASP	B	39	0.166	-9.982	84.518	1.00	53.13
6306	C	ASP	B	39	-0.279	-12.631	82.321	1.00	51.44
6307	O	ASP	B	39	0.347	-11.668	81.889	1.00	51.64
6308	N	HIS	B	40	-0.573	-13.697	81.582	1.00	51.62
6309	CA	HIS	B	40	-0.059	-13.849	80.227	1.00	51.91
6310	CB	HIS	B	40	1.104	-14.850	80.213	1.00	52.32
6311	CG	HIS	B	40	1.618	-15.200	81.576	1.00	54.08
6312	ND1	HIS	B	40	2.452	-14.370	82.297	1.00	54.07
6313	CE1	HIS	B	40	2.738	-14.939	83.456	1.00	55.31
6314	NE2	HIS	B	40	2.113	-16.103	83.516	1.00	55.18



FIGURE 3 DT

A	B	C	D	E	F	G	H	I	J
6315	CD2	HIS	B	40	1.405	-16.290	82.354	1.00	55.14
6316	C	HIS	B	40	-1.106	-14.346	79.247	1.00	51.73
6317	O	HIS	B	40	-0.952	-14.189	78.037	1.00	51.68
6318	N	GLU	B	41	-2.162	-14.966	79.755	1.00	51.57
6319	CA	GLU	B	41	-3.165	-15.525	78.863	1.00	51.93
6320	CB	GLU	B	41	-3.110	-17.053	78.913	1.00	52.01
6321	CG	GLU	B	41	-1.830	-17.658	78.355	1.00	53.18
6322	CD	GLU	B	41	-1.681	-19.133	78.686	1.00	54.96
6323	OE1	GLU	B	41	-1.048	-19.464	79.720	1.00	55.10
6324	OE2	GLU	B	41	-2.195	-19.962	77.906	1.00	55.09
6325	C	GLU	B	41	-4.590	-15.065	79.154	1.00	51.90
6326	O	GLU	B	41	-4.940	-14.762	80.299	1.00	51.84
6327	N	TYR	B	42	-5.408	-15.009	78.106	1.00	51.74
6328	CA	TYR	B	42	-6.831	-14.743	78.280	1.00	51.50
6329	CB	TYR	B	42	-7.226	-13.325	77.833	1.00	50.57
6330	CG	TYR	B	42	-6.995	-12.992	76.368	1.00	47.94
6331	CD1	TYR	B	42	-7.893	-13.394	75.392	1.00	45.17
6332	CE1	TYR	B	42	-7.694	-13.081	74.067	1.00	43.18
6333	CZ	TYR	B	42	-6.592	-12.343	73.699	1.00	43.34
6334	OH	TYR	B	42	-6.389	-12.031	72.371	1.00	41.78
6335	CE2	TYR	B	42	-5.691	-11.921	74.651	1.00	43.45
6336	CD2	TYR	B	42	-5.896	-12.242	75.972	1.00	44.84
6337	C	TYR	B	42	-7.655	-15.809	77.552	1.00	52.30
6338	O	TYR	B	42	-7.148	-16.489	76.658	1.00	52.29
6339	N	LEU	B	43	-8.910	-15.968	77.965	1.00	52.88
6340	CA	LEU	B	43	-9.832	-16.857	77.286	1.00	53.73
6341	CB	LEU	B	43	-10.737	-17.551	78.294	1.00	53.62
6342	CG	LEU	B	43	-10.033	-18.439	79.320	1.00	54.25
6343	CD1	LEU	B	43	-10.910	-18.638	80.538	1.00	54.41
6344	CD2	LEU	B	43	-9.644	-19.777	78.704	1.00	54.35
6345	C	LEU	B	43	-10.671	-16.031	76.311	1.00	54.45
6346	O	LEU	B	43	-10.997	-14.881	76.588	1.00	54.30
6347	N	TYR	B	44	-11.006	-16.613	75.166	1.00	55.68
6348	CA	TYR	B	44	-11.817	-15.923	74.171	1.00	57.26
6349	CB	TYR	B	44	-10.930	-15.157	73.178	1.00	57.10
6350	CG	TYR	B	44	-11.671	-14.398	72.091	1.00	57.59
6351	CD1	TYR	B	44	-12.356	-13.221	72.372	1.00	58.09
6352	CE1	TYR	B	44	-13.030	-12.516	71.369	1.00	58.19
6353	CZ	TYR	B	44	-13.022	-12.993	70.076	1.00	58.91
6354	OH	TYR	B	44	-13.687	-12.312	69.075	1.00	58.89
6355	CE2	TYR	B	44	-12.345	-14.158	69.773	1.00	59.05
6356	CD2	TYR	B	44	-11.673	-14.853	70.778	1.00	58.95
6357	C	TYR	B	44	-12.730	-16.925	73.470	1.00	58.24
6358	O	TYR	B	44	-12.459	-18.115	73.462	1.00	58.37
6359	N	LYS	B	45	-13.828	-16.435	72.910	1.00	59.96
6360	CA	LYS	B	45	-14.817	-17.274	72.236	1.00	61.44
6361	CB	LYS	B	45	-16.173	-17.124	72.920	1.00	61.57
6362	CG	LYS	B	45	-16.230	-16.025	73.991	1.00	62.26
6363	CD	LYS	B	45	-15.996	-14.613	73.431	1.00	62.59
6364	CE	LYS	B	45	-16.607	-13.542	74.347	1.00	63.16
6365	NZ	LYS	B	45	-18.100	-13.633	74.435	1.00	61.86

FIGURE 3 DU

A	B	C	D	E	F	G	H	I	J
6366	C	LYS	B	45	-14.922	-16.889	70.770	1.00	62.40
6367	O	LYS	B	45	-15.245	-15.751	70.455	1.00	62.63
6368	N	GLN	B	46	-14.661	-17.831	69.869	1.00	63.60
6369	CA	GLN	B	46	-14.641	-17.489	68.447	1.00	64.81
6370	CB	GLN	B	46	-13.338	-17.957	67.794	1.00	64.71
6371	CG	GLN	B	46	-12.837	-16.995	66.726	1.00	66.33
6372	CD	GLN	B	46	-11.343	-17.113	66.469	1.00	68.01
6373	OE1	GLN	B	46	-10.534	-16.532	67.202	1.00	68.30
6374	NE2	GLN	B	46	-10.971	-17.860	65.427	1.00	67.36
6375	C	GLN	B	46	-15.862	-17.981	67.668	1.00	65.41
6376	O	GLN	B	46	-16.773	-17.208	67.363	1.00	65.55
6377	N	GLU	B	47	-15.866	-19.260	67.314	1.00	65.98
6378	CA	GLU	B	47	-17.036	-19.846	66.675	1.00	66.56
6379	CB	GLU	B	47	-16.703	-20.456	65.307	1.00	66.89
6380	CG	GLU	B	47	-17.220	-19.640	64.120	1.00	68.68
6381	CD	GLU	B	47	-16.237	-18.599	63.590	1.00	71.16
6382	OE1	GLU	B	47	-16.247	-17.434	64.076	1.00	72.38
6383	OE2	GLU	B	47	-15.473	-18.943	62.656	1.00	70.88
6384	C	GLU	B	47	-17.619	-20.854	67.668	1.00	66.36
6385	O	GLU	B	47	-17.660	-22.064	67.430	1.00	66.62
6386	N	ASN	B	48	-18.041	-20.304	68.803	1.00	65.95
6387	CA	ASN	B	48	-18.581	-21.041	69.950	1.00	65.37
6388	CB	ASN	B	48	-19.957	-21.680	69.676	1.00	65.48
6389	CG	ASN	B	48	-21.116	-20.758	70.094	1.00	65.80
6390	OD1	ASN	B	48	-21.165	-20.288	71.239	1.00	64.98
6391	ND2	ASN	B	48	-22.032	-20.477	69.162	1.00	65.73
6392	C	ASN	B	48	-17.616	-21.941	70.736	1.00	64.81
6393	O	ASN	B	48	-17.971	-22.434	71.807	1.00	64.82
6394	N	ASN	B	49	-16.400	-22.138	70.226	1.00	63.93
6395	CA	ASN	B	49	-15.387	-22.856	70.993	1.00	63.05
6396	CB	ASN	B	49	-14.321	-23.493	70.101	1.00	63.20
6397	CG	ASN	B	49	-14.676	-23.455	68.628	1.00	63.85
6398	OD1	ASN	B	49	-14.554	-22.414	67.976	1.00	65.23
6399	ND2	ASN	B	49	-15.092	-24.596	68.087	1.00	63.26
6400	C	ASN	B	49	-14.702	-21.861	71.923	1.00	62.50
6401	O	ASN	B	49	-14.864	-20.649	71.780	1.00	62.26
6402	N	ILE	B	50	-13.931	-22.367	72.877	1.00	61.74
6403	CA	ILE	B	50	-13.226	-21.486	73.787	1.00	60.91
6404	CB	ILE	B	50	-13.512	-21.857	75.244	1.00	61.30
6405	CG1	ILE	B	50	-15.005	-21.701	75.542	1.00	61.57
6406	CD1	ILE	B	50	-15.350	-22.003	76.982	1.00	61.75
6407	CG2	ILE	B	50	-12.706	-20.969	76.200	1.00	60.95
6408	C	ILE	B	50	-11.742	-21.534	73.500	1.00	60.12
6409	O	ILE	B	50	-11.081	-22.521	73.787	1.00	59.88
6410	N	LEU	B	51	-11.239	-20.458	72.909	1.00	59.28
6411	CA	LEU	B	51	-9.831	-20.335	72.572	1.00	58.43
6412	CB	LEU	B	51	-9.658	-19.391	71.381	1.00	58.12
6413	CG	LEU	B	51	-9.703	-20.085	70.019	1.00	58.00
6414	CD1	LEU	B	51	-10.759	-21.167	70.027	1.00	57.14
6415	CD2	LEU	B	51	-9.933	-19.103	68.885	1.00	57.24
6416	C	LEU	B	51	-9.038	-19.818	73.759	1.00	57.94

FIGURE 3 DV

A	B	C	D	E	F	G	H	I	J
6417	O	LEU	B	51	-9.608	-19.303	74.713	1.00	57.72
6418	N	VAL	B	52	-7.723	-19.986	73.712	1.00	57.43
6419	CA	VAL	B	52	-6.860	-19.429	74.746	1.00	56.95
6420	CB	VAL	B	52	-6.370	-20.478	75.756	1.00	57.02
6421	CG1	VAL	B	52	-5.285	-19.891	76.638	1.00	56.40
6422	CG2	VAL	B	52	-5.866	-21.719	75.049	1.00	56.93
6423	C	VAL	B	52	-5.690	-18.727	74.078	1.00	56.84
6424	O	VAL	B	52	-4.989	-19.301	73.248	1.00	56.50
6425	N	PHE	B	53	-5.496	-17.467	74.434	1.00	56.79
6426	CA	PHE	B	53	-4.467	-16.673	73.805	1.00	56.75
6427	CB	PHE	B	53	-5.044	-15.368	73.277	1.00	56.60
6428	CG	PHE	B	53	-6.099	-15.554	72.245	1.00	57.26
6429	CD1	PHE	B	53	-7.339	-16.070	72.590	1.00	57.88
6430	CE1	PHE	B	53	-8.321	-16.235	71.645	1.00	57.75
6431	CZ	PHE	B	53	-8.077	-15.889	70.336	1.00	58.84
6432	CE2	PHE	B	53	-6.844	-15.375	69.973	1.00	58.70
6433	CD2	PHE	B	53	-5.862	-15.209	70.927	1.00	57.58
6434	C	PHE	B	53	-3.329	-16.344	74.729	1.00	56.71
6435	O	PHE	B	53	-3.484	-16.262	75.941	1.00	56.63
6436	N	ASN	B	54	-2.182	-16.146	74.100	1.00	56.98
6437	CA	ASN	B	54	-0.966	-15.738	74.743	1.00	57.09
6438	CB	ASN	B	54	0.171	-16.568	74.181	1.00	57.12
6439	CG	ASN	B	54	1.498	-16.206	74.769	1.00	56.01
6440	OD1	ASN	B	54	2.111	-15.213	74.381	1.00	54.87
6441	ND2	ASN	B	54	1.965	-17.022	75.703	1.00	55.05
6442	C	ASN	B	54	-0.799	-14.286	74.342	1.00	57.73
6443	O	ASN	B	54	-0.528	-13.986	73.181	1.00	57.55
6444	N	ALA	B	55	-0.994	-13.383	75.292	1.00	58.43
6445	CA	ALA	B	55	-0.932	-11.960	75.000	1.00	59.29
6446	CB	ALA	B	55	-1.108	-11.160	76.277	1.00	59.33
6447	C	ALA	B	55	0.369	-11.587	74.321	1.00	59.88
6448	O	ALA	B	55	0.419	-10.651	73.524	1.00	60.04
6449	N	GLU	B	56	1.413	-12.337	74.645	1.00	60.75
6450	CA	GLU	B	56	2.749	-12.095	74.130	1.00	61.77
6451	CB	GLU	B	56	3.728	-13.068	74.776	1.00	62.15
6452	CG	GLU	B	56	4.532	-12.443	75.894	1.00	63.77
6453	CD	GLU	B	56	5.370	-11.280	75.395	1.00	66.27
6454	OE1	GLU	B	56	6.291	-11.541	74.584	1.00	67.34
6455	OE2	GLU	B	56	5.105	-10.117	75.805	1.00	65.91
6456	C	GLU	B	56	2.883	-12.139	72.607	1.00	62.06
6457	O	GLU	B	56	3.203	-11.127	71.983	1.00	62.17
6458	N	TYR	B	57	2.673	-13.311	72.013	1.00	62.35
6459	CA	TYR	B	57	2.769	-13.431	70.560	1.00	62.74
6460	CB	TYR	B	57	3.508	-14.701	70.125	1.00	63.09
6461	CG	TYR	B	57	4.429	-15.295	71.152	1.00	64.05
6462	CD1	TYR	B	57	5.027	-14.509	72.119	1.00	65.43
6463	CE1	TYR	B	57	5.864	-15.056	73.061	1.00	66.27
6464	CZ	TYR	B	57	6.120	-16.403	73.041	1.00	66.25
6465	OH	TYR	B	57	6.963	-16.950	73.978	1.00	67.79
6466	CE2	TYR	B	57	5.545	-17.205	72.085	1.00	66.31
6467	CD2	TYR	B	57	4.706	-16.650	71.149	1.00	65.51

FIGURE 3 DW

A	B	C	D	E	F	G	H	I	J
6468	C	TYR	B	57	1.382	-13.440	69.945	1.00	62.46
6469	O	TYR	B	57	1.233	-13.316	68.733	1.00	62.46
6470	N	GLY	B	58	0.369	-13.594	70.787	1.00	62.28
6471	CA	GLY	B	58	-1.004	-13.617	70.317	1.00	62.29
6472	C	GLY	B	58	-1.392	-14.950	69.710	1.00	62.12
6473	O	GLY	B	58	-2.419	-15.056	69.047	1.00	61.90
6474	N	ASN	B	59	-0.560	-15.966	69.928	1.00	62.10
6475	CA	ASN	B	59	-0.838	-17.299	69.409	1.00	62.12
6476	CB	ASN	B	59	0.426	-18.160	69.412	1.00	62.09
6477	CG	ASN	B	59	0.910	-18.464	70.815	1.00	62.18
6478	OD1	ASN	B	59	1.191	-17.553	71.586	1.00	60.82
6479	ND2	ASN	B	59	0.993	-19.748	71.160	1.00	64.54
6480	C	ASN	B	59	-1.904	-17.977	70.256	1.00	62.01
6481	O	ASN	B	59	-1.908	-17.865	71.484	1.00	62.06
6482	N	SER	B	60	-2.804	-18.691	69.605	1.00	61.92
6483	CA	SER	B	60	-3.850	-19.373	70.340	1.00	61.95
6484	CB	SER	B	60	-5.204	-18.728	70.056	1.00	61.91
6485	OG	SER	B	60	-5.667	-19.113	68.772	1.00	62.01
6486	C	SER	B	60	-3.945	-20.844	69.995	1.00	61.93
6487	O	SER	B	60	-3.346	-21.325	69.040	1.00	61.77
6488	N	SER	B	61	-4.708	-21.552	70.815	1.00	62.17
6489	CA	SER	B	61	-5.069	-22.932	70.555	1.00	62.30
6490	CB	SER	B	61	-4.048	-23.917	71.137	1.00	62.27
6491	OG	SER	B	61	-3.943	-23.803	72.538	1.00	62.62
6492	C	SER	B	61	-6.455	-23.110	71.158	1.00	62.28
6493	O	SER	B	61	-6.931	-22.250	71.904	1.00	62.54
6494	N	VAL	B	62	-7.125	-24.198	70.810	1.00	62.21
6495	CA	VAL	B	62	-8.445	-24.449	71.357	1.00	61.76
6496	CB	VAL	B	62	-9.174	-25.565	70.591	1.00	61.90
6497	CG1	VAL	B	62	-10.480	-25.921	71.291	1.00	61.46
6498	CG2	VAL	B	62	-9.422	-25.139	69.141	1.00	61.92
6499	C	VAL	B	62	-8.277	-24.855	72.807	1.00	61.57
6500	O	VAL	B	62	-7.427	-25.691	73.131	1.00	61.62
6501	N	PHE	B	63	-9.067	-24.244	73.683	1.00	60.96
6502	CA	PHE	B	63	-9.010	-24.560	75.098	1.00	60.46
6503	CB	PHE	B	63	-9.159	-23.290	75.932	1.00	60.45
6504	CG	PHE	B	63	-9.346	-23.553	77.399	1.00	60.16
6505	CD1	PHE	B	63	-10.613	-23.705	77.931	1.00	59.55
6506	CE1	PHE	B	63	-10.788	-23.956	79.270	1.00	59.59
6507	CZ	PHE	B	63	-9.695	-24.050	80.099	1.00	60.18
6508	CE2	PHE	B	63	-8.425	-23.895	79.584	1.00	60.64
6509	CD2	PHE	B	63	-8.254	-23.651	78.240	1.00	59.87
6510	C	PHE	B	63	-10.137	-25.515	75.425	1.00	60.33
6511	O	PHE	B	63	-9.985	-26.460	76.201	1.00	60.23
6512	N	LEU	B	64	-11.283	-25.244	74.824	1.00	60.21
6513	CA	LEU	B	64	-12.467	-26.039	75.041	1.00	60.12
6514	CB	LEU	B	64	-13.212	-25.543	76.274	1.00	60.27
6515	CG	LEU	B	64	-14.335	-26.436	76.790	1.00	60.44
6516	CD1	LEU	B	64	-13.765	-27.490	77.728	1.00	59.69
6517	CD2	LEU	B	64	-15.378	-25.585	77.495	1.00	60.61
6518	C	LEU	B	64	-13.349	-25.892	73.822	1.00	60.20

FIGURE 3 DX

A	B	C	D	E	F	G	H	I	J
6519	O	LEU	B	64	-14.011	-24.866	73.635	1.00	60.10
6520	N	GLU	B	65	-13.328	-26.906	72.968	1.00	60.28
6521	CA	GLU	B	65	-14.175	-26.897	71.791	1.00	60.35
6522	CB	GLU	B	65	-13.674	-27.905	70.760	1.00	60.68
6523	CG	GLU	B	65	-13.138	-29.193	71.362	1.00	61.58
6524	CD	GLU	B	65	-12.352	-30.009	70.355	1.00	63.25
6525	OE1	GLU	B	65	-12.038	-31.190	70.647	1.00	62.40
6526	OE2	GLU	B	65	-12.044	-29.457	69.271	1.00	63.97
6527	C	GLU	B	65	-15.567	-27.252	72.261	1.00	59.89
6528	O	GLU	B	65	-15.727	-28.072	73.162	1.00	59.64
6529	N	ASN	B	66	-16.579	-26.620	71.680	1.00	59.76
6530	CA	ASN	B	66	-17.937	-26.937	72.098	1.00	59.62
6531	CB	ASN	B	66	-18.818	-25.704	72.323	1.00	60.30
6532	CG	ASN	B	66	-19.246	-25.571	73.777	1.00	61.27
6533	OD1	ASN	B	66	-19.333	-26.574	74.502	1.00	62.57
6534	ND2	ASN	B	66	-19.503	-24.343	74.214	1.00	62.45
6535	C	ASN	B	66	-18.652	-28.005	71.308	1.00	58.77
6536	O	ASN	B	66	-19.642	-27.760	70.620	1.00	59.19
6537	N	SER	B	67	-18.092	-29.197	71.421	1.00	57.46
6538	CA	SER	B	67	-18.703	-30.416	70.970	1.00	56.01
6539	CB	SER	B	67	-17.907	-31.039	69.826	1.00	56.07
6540	OG	SER	B	67	-16.517	-31.116	70.123	1.00	56.11
6541	C	SER	B	67	-18.569	-31.213	72.262	1.00	55.06
6542	O	SER	B	67	-19.113	-32.303	72.415	1.00	54.84
6543	N	THR	B	68	-17.836	-30.618	73.202	1.00	53.88
6544	CA	THR	B	68	-17.585	-31.215	74.509	1.00	53.38
6545	CB	THR	B	68	-16.723	-30.287	75.380	1.00	53.52
6546	OG1	THR	B	68	-15.492	-29.980	74.710	1.00	54.39
6547	CG2	THR	B	68	-16.279	-31.019	76.639	1.00	52.84
6548	C	THR	B	68	-18.858	-31.530	75.280	1.00	52.69
6549	O	THR	B	68	-18.966	-32.595	75.885	1.00	52.90
6550	N	PHE	B	69	-19.814	-30.607	75.269	1.00	51.44
6551	CA	PHE	B	69	-21.051	-30.820	76.005	1.00	50.59
6552	CB	PHE	B	69	-21.206	-29.792	77.136	1.00	50.28
6553	CG	PHE	B	69	-19.956	-29.565	77.920	1.00	48.47
6554	CD1	PHE	B	69	-19.556	-30.466	78.890	1.00	47.69
6555	CE1	PHE	B	69	-18.394	-30.261	79.602	1.00	46.18
6556	CZ	PHE	B	69	-17.622	-29.155	79.347	1.00	45.66
6557	CE2	PHE	B	69	-18.014	-28.248	78.379	1.00	46.23
6558	CD2	PHE	B	69	-19.170	-28.457	77.675	1.00	46.14
6559	C	PHE	B	69	-22.300	-30.818	75.126	1.00	50.46
6560	O	PHE	B	69	-23.347	-30.320	75.538	1.00	50.05
6561	N	ASP	B	70	-22.216	-31.380	73.925	1.00	50.30
6562	CA	ASP	B	70	-23.421	-31.439	73.103	1.00	50.14
6563	CB	ASP	B	70	-23.127	-31.302	71.611	1.00	50.21
6564	CG	ASP	B	70	-22.075	-32.249	71.140	1.00	50.56
6565	OD1	ASP	B	70	-21.477	-31.992	70.065	1.00	51.10
6566	OD2	ASP	B	70	-21.787	-33.283	71.773	1.00	51.39
6567	C	ASP	B	70	-24.263	-32.666	73.439	1.00	49.78
6568	O	ASP	B	70	-25.246	-32.959	72.772	1.00	49.79
6569	N	GLU	B	71	-23.864	-33.362	74.499	1.00	49.75

FIGURE 3 DY

A	B	C	D	E	F	G	H	I	J
6570	CA	GLU	B	71	-24.624	-34.478	75.050	1.00	49.63
6571	CB	GLU	B	71	-23.788	-35.753	75.098	1.00	49.75
6572	CG	GLU	B	71	-23.403	-36.345	73.757	1.00	50.10
6573	CD	GLU	B	71	-23.161	-37.839	73.867	1.00	50.97
6574	OE1	GLU	B	71	-22.363	-38.252	74.739	1.00	50.52
6575	OE2	GLU	B	71	-23.784	-38.602	73.095	1.00	51.93
6576	C	GLU	B	71	-24.996	-34.103	76.479	1.00	49.34
6577	O	GLU	B	71	-25.487	-34.931	77.247	1.00	49.41
6578	N	PHE	B	72	-24.736	-32.856	76.844	1.00	48.96
6579	CA	PHE	B	72	-25.026	-32.391	78.194	1.00	48.61
6580	CB	PHE	B	72	-24.496	-30.976	78.397	1.00	48.58
6581	CG	PHE	B	72	-24.533	-30.534	79.814	1.00	48.54
6582	CD1	PHE	B	72	-23.728	-31.149	80.756	1.00	48.14
6583	CE1	PHE	B	72	-23.758	-30.754	82.060	1.00	48.48
6584	CZ	PHE	B	72	-24.609	-29.739	82.454	1.00	49.56
6585	CE2	PHE	B	72	-25.425	-29.119	81.528	1.00	48.92
6586	CD2	PHE	B	72	-25.383	-29.520	80.214	1.00	48.44
6587	C	PHE	B	72	-26.512	-32.472	78.568	1.00	48.44
6588	O	PHE	B	72	-26.853	-32.800	79.704	1.00	48.48
6589	N	GLY	B	73	-27.393	-32.167	77.620	1.00	48.19
6590	CA	GLY	B	73	-28.821	-32.283	77.859	1.00	48.01
6591	C	GLY	B	73	-29.558	-30.962	78.005	1.00	47.98
6592	O	GLY	B	73	-30.791	-30.921	78.038	1.00	47.82
6593	N	HIS	B	74	-28.805	-29.874	78.112	1.00	47.47
6594	CA	HIS	B	74	-29.419	-28.565	78.248	1.00	47.23
6595	CB	HIS	B	74	-29.604	-28.214	79.726	1.00	47.25
6596	CG	HIS	B	74	-29.614	-29.405	80.626	1.00	46.37
6597	ND1	HIS	B	74	-30.766	-29.894	81.203	1.00	45.82
6598	CE1	HIS	B	74	-30.473	-30.956	81.932	1.00	46.66
6599	NE2	HIS	B	74	-29.171	-31.173	81.850	1.00	47.57
6600	CD2	HIS	B	74	-28.611	-30.216	81.038	1.00	46.71
6601	C	HIS	B	74	-28.451	-27.600	77.631	1.00	46.90
6602	O	HIS	B	74	-27.282	-27.940	77.447	1.00	46.76
6603	N	SER	B	75	-28.920	-26.404	77.305	1.00	46.46
6604	CA	SER	B	75	-28.026	-25.408	76.738	1.00	46.32
6605	CB	SER	B	75	-28.785	-24.375	75.902	1.00	46.54
6606	CG	SER	B	75	-29.882	-23.847	76.622	1.00	47.39
6607	C	SER	B	75	-27.268	-24.732	77.872	1.00	46.25
6608	O	SER	B	75	-27.832	-24.414	78.933	1.00	45.78
6609	N	ILE	B	76	-25.985	-24.512	77.631	1.00	45.86
6610	CA	ILE	B	76	-25.103	-23.945	78.618	1.00	45.54
6611	CB	ILE	B	76	-23.717	-24.560	78.426	1.00	45.97
6612	CG1	ILE	B	76	-23.835	-26.080	78.591	1.00	45.17
6613	CD1	ILE	B	76	-22.548	-26.771	78.905	1.00	44.42
6614	CG2	ILE	B	76	-22.693	-23.948	79.386	1.00	45.71
6615	C	ILE	B	76	-25.096	-22.432	78.520	1.00	45.32
6616	O	ILE	B	76	-24.657	-21.862	77.525	1.00	45.21
6617	N	ASN	B	77	-25.608	-21.779	79.561	1.00	44.93
6618	CA	ASN	B	77	-25.697	-20.332	79.556	1.00	44.21
6619	CB	ASN	B	77	-26.619	-19.827	80.652	1.00	44.24
6620	CG	ASN	B	77	-26.976	-18.376	80.453	1.00	45.26

FIGURE 3 DZ

A	B	C	D	E	F	G	H	I	J
6621	OD1	ASN	B	77	-27.574	-18.024	79.439	1.00	46.47
6622	ND2	ASN	B	77	-26.574	-17.515	81.390	1.00	45.50
6623	C	ASN	B	77	-24.355	-19.649	79.697	1.00	43.73
6624	O	ASN	B	77	-24.052	-18.705	78.983	1.00	43.48
6625	N	ASP	B	78	-23.554	-20.120	80.640	1.00	43.45
6626	CA	ASP	B	78	-22.259	-19.525	80.864	1.00	43.13
6627	CB	ASP	B	78	-22.384	-18.321	81.797	1.00	43.38
6628	CG	ASP	B	78	-21.403	-17.230	81.458	1.00	43.83
6629	OD1	ASP	B	78	-20.268	-17.544	81.076	1.00	46.49
6630	OD2	ASP	B	78	-21.678	-16.022	81.507	1.00	47.24
6631	C	ASP	B	78	-21.324	-20.559	81.455	1.00	42.89
6632	O	ASP	B	78	-21.730	-21.673	81.776	1.00	43.02
6633	N	TYR	B	79	-20.061	-20.201	81.571	1.00	42.54
6634	CA	TYR	B	79	-19.096	-21.116	82.128	1.00	42.96
6635	CB	TYR	B	79	-18.338	-21.875	81.032	1.00	43.09
6636	CG	TYR	B	79	-17.394	-20.992	80.273	1.00	44.00
6637	CD1	TYR	B	79	-17.779	-20.393	79.074	1.00	45.46
6638	CE1	TYR	B	79	-16.913	-19.560	78.384	1.00	45.52
6639	CZ	TYR	B	79	-15.656	-19.310	78.903	1.00	45.23
6640	OH	TYR	B	79	-14.781	-18.484	78.237	1.00	46.02
6641	CE2	TYR	B	79	-15.264	-19.890	80.085	1.00	45.28
6642	CD2	TYR	B	79	-16.129	-20.723	80.761	1.00	44.62
6643	C	TYR	B	79	-18.138	-20.313	82.965	1.00	42.84
6644	O	TYR	B	79	-17.936	-19.115	82.738	1.00	42.71
6645	N	SER	B	80	-17.560	-20.969	83.956	1.00	42.90
6646	CA	SER	B	80	-16.600	-20.299	84.798	1.00	43.31
6647	CB	SER	B	80	-17.222	-19.882	86.122	1.00	42.93
6648	OG	SER	B	80	-16.279	-19.122	86.845	1.00	43.95
6649	C	SER	B	80	-15.433	-21.211	85.040	1.00	43.25
6650	O	SER	B	80	-15.581	-22.303	85.566	1.00	43.48
6651	N	ILE	B	81	-14.262	-20.744	84.666	1.00	43.80
6652	CA	ILE	B	81	-13.081	-21.550	84.817	1.00	44.61
6653	CB	ILE	B	81	-12.175	-21.418	83.580	1.00	44.62
6654	CG1	ILE	B	81	-12.882	-22.074	82.391	1.00	45.63
6655	CD1	ILE	B	81	-12.421	-21.598	81.025	1.00	48.10
6656	CG2	ILE	B	81	-10.861	-22.138	83.811	1.00	45.52
6657	C	ILE	B	81	-12.347	-21.291	86.125	1.00	44.73
6658	O	ILE	B	81	-12.005	-20.158	86.464	1.00	44.33
6659	N	SER	B	82	-12.179	-22.381	86.866	1.00	45.06
6660	CA	SER	B	82	-11.396	-22.434	88.085	1.00	45.20
6661	CB	SER	B	82	-11.103	-23.899	88.377	1.00	44.99
6662	OG	SER	B	82	-10.305	-24.031	89.520	1.00	47.54
6663	C	SER	B	82	-10.087	-21.672	87.890	1.00	44.93
6664	O	SER	B	82	-9.421	-21.833	86.869	1.00	44.86
6665	N	PRO	B	83	-9.708	-20.849	88.864	1.00	44.77
6666	CA	PRO	B	83	-8.490	-20.037	88.756	1.00	44.56
6667	CB	PRO	B	83	-8.406	-19.335	90.118	1.00	44.46
6668	CG	PRO	B	83	-9.741	-19.422	90.691	1.00	44.29
6669	CD	PRO	B	83	-10.398	-20.648	90.148	1.00	44.70
6670	C	PRO	B	83	-7.248	-20.897	88.554	1.00	44.43
6671	O	PRO	B	83	-6.257	-20.434	87.984	1.00	44.18

FIGURE 3 EA

A	B	C	D	E	F	G	H	I	J
6672	N	ASP	B	84	-7.290	-22.137	89.023	1.00	44.38
6673	CA	ASP	B	84	-6.131	-23.010	88.852	1.00	44.64
6674	CB	ASP	B	84	-5.999	-23.998	90.007	1.00	44.39
6675	CG	ASP	B	84	-7.167	-24.944	90.091	1.00	45.05
6676	OD1	ASP	B	84	-8.038	-24.872	89.206	1.00	46.59
6677	OD2	ASP	B	84	-7.305	-25.791	90.998	1.00	45.80
6678	C	ASP	B	84	-6.214	-23.744	87.520	1.00	44.63
6679	O	ASP	B	84	-5.338	-24.529	87.190	1.00	44.63
6680	N	GLY	B	85	-7.272	-23.471	86.760	1.00	44.63
6681	CA	GLY	B	85	-7.465	-24.078	85.453	1.00	44.80
6682	C	GLY	B	85	-7.745	-25.573	85.485	1.00	45.07
6683	O	GLY	B	85	-7.631	-26.239	84.455	1.00	45.53
6684	N	GLN	B	86	-8.115	-26.100	86.653	1.00	44.42
6685	CA	GLN	B	86	-8.384	-27.524	86.805	1.00	44.00
6686	CB	GLN	B	86	-7.959	-27.995	88.198	1.00	44.18
6687	CG	GLN	B	86	-6.464	-27.868	88.466	1.00	44.95
6688	CD	GLN	B	86	-6.044	-28.519	89.772	1.00	46.30
6689	OE1	GLN	B	86	-6.805	-29.304	90.353	1.00	47.20
6690	NE2	GLN	B	86	-4.834	-28.200	90.239	1.00	45.35
6691	C	GLN	B	86	-9.849	-27.901	86.566	1.00	43.84
6692	O	GLN	B	86	-10.165	-29.024	86.140	1.00	43.25
6693	N	PHE	B	87	-10.750	-26.965	86.837	1.00	43.39
6694	CA	PHE	B	87	-12.166	-27.251	86.687	1.00	43.01
6695	CB	PHE	B	87	-12.822	-27.432	88.060	1.00	43.23
6696	CG	PHE	B	87	-12.291	-28.599	88.840	1.00	43.82
6697	CD1	PHE	B	87	-12.865	-29.850	88.709	1.00	43.21
6698	CE1	PHE	B	87	-12.386	-30.920	89.427	1.00	44.46
6699	CZ	PHE	B	87	-11.314	-30.759	90.287	1.00	43.15
6700	CE2	PHE	B	87	-10.735	-29.523	90.428	1.00	43.96
6701	CD2	PHE	B	87	-11.224	-28.444	89.709	1.00	43.67
6702	C	PHE	B	87	-12.906	-26.161	85.945	1.00	42.92
6703	O	PHE	B	87	-12.451	-25.018	85.846	1.00	42.77
6704	N	ILE	B	88	-14.074	-26.521	85.436	1.00	42.65
6705	CA	ILE	B	88	-14.914	-25.560	84.770	1.00	42.40
6706	CB	ILE	B	88	-14.816	-25.705	83.247	1.00	42.76
6707	CG1	ILE	B	88	-15.921	-24.882	82.576	1.00	43.27
6708	CD1	ILE	B	88	-15.661	-24.609	81.115	1.00	43.05
6709	CG2	ILE	B	88	-14.948	-27.143	82.845	1.00	42.96
6710	C	ILE	B	88	-16.339	-25.723	85.267	1.00	41.86
6711	O	ILE	B	88	-16.853	-26.835	85.410	1.00	41.80
6712	N	LEU	B	89	-16.960	-24.601	85.583	1.00	41.05
6713	CA	LEU	B	89	-18.324	-24.617	86.064	1.00	40.03
6714	CB	LEU	B	89	-18.508	-23.552	87.141	1.00	40.27
6715	CG	LEU	B	89	-19.862	-23.487	87.831	1.00	40.26
6716	CD1	LEU	B	89	-19.981	-22.168	88.553	1.00	41.65
6717	CD2	LEU	B	89	-20.041	-24.645	88.799	1.00	39.37
6718	C	LEU	B	89	-19.227	-24.319	84.889	1.00	39.65
6719	O	LEU	B	89	-19.009	-23.355	84.160	1.00	38.91
6720	N	LEU	B	90	-20.232	-25.160	84.697	1.00	39.35
6721	CA	LEU	B	90	-21.187	-24.955	83.635	1.00	39.46
6722	CB	LEU	B	90	-21.404	-26.247	82.845	1.00	39.49



FIGURE 3 EB

A	B	C	D	E	F	G	H	I	J
6723	CG	LEU	B	90	-20.114	-26.900	82.323	1.00	40.77
6724	CD1	LEU	B	90	-20.330	-28.380	82.030	1.00	41.95
6725	CD2	LEU	B	90	-19.583	-26.185	81.088	1.00	41.64
6726	C	LEU	B	90	-22.490	-24.458	84.232	1.00	39.06
6727	O	LEU	B	90	-23.051	-25.067	85.142	1.00	39.14
6728	N	GLU	B	91	-22.965	-23.335	83.721	1.00	38.70
6729	CA	GLU	B	91	-24.212	-22.751	84.196	1.00	38.30
6730	CB	GLU	B	91	-24.028	-21.242	84.349	1.00	37.90
6731	CG	GLU	B	91	-25.179	-20.482	84.977	1.00	37.84
6732	CD	GLU	B	91	-24.851	-19.007	85.130	1.00	38.88
6733	OE1	GLU	B	91	-25.310	-18.200	84.279	1.00	39.94
6734	OE2	GLU	B	91	-24.127	-18.656	86.092	1.00	37.39
6735	C	GLU	B	91	-25.326	-23.063	83.201	1.00	37.98
6736	O	GLU	B	91	-25.174	-22.818	82.007	1.00	38.03
6737	N	TYR	B	92	-26.423	-23.635	83.693	1.00	37.65
6738	CA	TYR	B	92	-27.590	-23.931	82.862	1.00	37.66
6739	CB	TYR	B	92	-27.513	-25.332	82.232	1.00	37.50
6740	CG	TYR	B	92	-27.540	-26.511	83.182	1.00	36.81
6741	CD1	TYR	B	92	-26.466	-26.779	84.016	1.00	36.25
6742	CE1	TYR	B	92	-26.486	-27.871	84.870	1.00	37.27
6743	CZ	TYR	B	92	-27.586	-28.708	84.887	1.00	36.87
6744	OH	TYR	B	92	-27.602	-29.787	85.745	1.00	37.50
6745	CE2	TYR	B	92	-28.662	-28.468	84.049	1.00	35.25
6746	CD2	TYR	B	92	-28.632	-27.380	83.209	1.00	35.06
6747	C	TYR	B	92	-28.911	-23.702	83.608	1.00	37.66
6748	O	TYR	B	92	-28.907	-23.378	84.790	1.00	37.77
6749	N	ASN	B	93	-30.028	-23.875	82.913	1.00	38.10
6750	CA	ASN	B	93	-31.357	-23.557	83.451	1.00	38.81
6751	CB	ASN	B	93	-31.871	-24.624	84.420	1.00	39.42
6752	CG	ASN	B	93	-32.278	-25.913	83.716	1.00	40.81
6753	OD1	ASN	B	93	-32.194	-26.024	82.491	1.00	43.68
6754	ND2	ASN	B	93	-32.711	-26.892	84.490	1.00	40.78
6755	C	ASN	B	93	-31.394	-22.166	84.099	1.00	38.86
6756	O	ASN	B	93	-32.037	-21.948	85.137	1.00	39.17
6757	N	TYR	B	94	-30.686	-21.243	83.464	1.00	38.00
6758	CA	TYR	B	94	-30.645	-19.861	83.856	1.00	37.85
6759	CB	TYR	B	94	-29.830	-19.090	82.822	1.00	37.50
6760	CG	TYR	B	94	-29.996	-17.591	82.885	1.00	37.18
6761	CD1	TYR	B	94	-29.226	-16.832	83.760	1.00	35.96
6762	CE1	TYR	B	94	-29.359	-15.461	83.831	1.00	34.63
6763	CZ	TYR	B	94	-30.263	-14.825	83.021	1.00	34.93
6764	OH	TYR	B	94	-30.358	-13.454	83.112	1.00	36.76
6765	CE2	TYR	B	94	-31.052	-15.549	82.126	1.00	34.11
6766	CD2	TYR	B	94	-30.912	-16.929	82.064	1.00	35.21
6767	C	TYR	B	94	-32.059	-19.294	83.923	1.00	37.99
6768	O	TYR	B	94	-32.809	-19.377	82.952	1.00	38.37
6769	N	VAL	B	95	-32.427	-18.748	85.081	1.00	37.75
6770	CA	VAL	B	95	-33.712	-18.077	85.251	1.00	37.49
6771	CB	VAL	B	95	-34.715	-18.902	86.100	1.00	37.70
6772	CG1	VAL	B	95	-36.058	-18.167	86.237	1.00	37.67
6773	CG2	VAL	B	95	-34.960	-20.290	85.471	1.00	37.86

FIGURE 3 EC

A	B	C	D	E	F	G	H	I	J
6774	C	VAL	B	95	-33.419	-16.716	85.885	1.00	37.08
6775	O	VAL	B	95	-33.012	-16.627	87.046	1.00	37.66
6776	N	LYS	B	96	-33.583	-15.663	85.097	1.00	36.23
6777	CA	LYS	B	96	-33.286	-14.309	85.554	1.00	35.28
6778	CB	LYS	B	96	-33.368	-13.312	84.392	1.00	35.17
6779	CG	LYS	B	96	-33.139	-11.886	84.831	1.00	35.12
6780	CD	LYS	B	96	-33.255	-10.901	83.677	1.00	36.00
6781	CE	LYS	B	96	-33.274	-9.465	84.177	1.00	35.60
6782	NZ	LYS	B	96	-34.266	-9.245	85.303	1.00	33.79
6783	C	LYS	B	96	-34.190	-13.831	86.676	1.00	34.41
6784	O	LYS	B	96	-35.374	-14.163	86.721	1.00	34.08
6785	N	GLN	B	97	-33.608	-13.074	87.600	1.00	33.47
6786	CA	GLN	B	97	-34.378	-12.439	88.655	1.00	32.58
6787	CB	GLN	B	97	-33.836	-12.785	90.027	1.00	32.88
6788	CG	GLN	B	97	-34.818	-12.535	91.138	1.00	35.20
6789	CD	GLN	B	97	-34.220	-12.791	92.519	1.00	38.14
6790	OE1	GLN	B	97	-34.839	-13.460	93.339	1.00	39.28
6791	NE2	GLN	B	97	-33.020	-12.250	92.776	1.00	38.20
6792	C	GLN	B	97	-34.312	-10.945	88.410	1.00	31.47
6793	O	GLN	B	97	-34.973	-10.451	87.516	1.00	30.40
6794	N	TRP	B	98	-33.485	-10.225	89.166	1.00	30.46
6795	CA	TRP	B	98	-33.424	-8.785	88.967	1.00	29.28
6796	CB	TRP	B	98	-33.297	-8.019	90.281	1.00	28.77
6797	CG	TRP	B	98	-34.248	-8.527	91.306	1.00	26.51
6798	CD1	TRP	B	98	-33.959	-8.854	92.601	1.00	26.16
6799	NE1	TRP	B	98	-35.079	-9.340	93.228	1.00	26.15
6800	CE2	TRP	B	98	-36.128	-9.317	92.345	1.00	23.81
6801	CD2	TRP	B	98	-35.638	-8.826	91.121	1.00	24.92
6802	CE3	TRP	B	98	-36.523	-8.722	90.042	1.00	22.52
6803	CZ3	TRP	B	98	-37.826	-9.097	90.222	1.00	22.86
6804	CH2	TRP	B	98	-38.283	-9.577	91.456	1.00	22.77
6805	CZ2	TRP	B	98	-37.449	-9.693	92.522	1.00	23.43
6806	C	TRP	B	98	-32.365	-8.427	87.951	1.00	29.53
6807	O	TRP	B	98	-32.213	-9.127	86.955	1.00	29.73
6808	N	ARG	B	99	-31.652	-7.333	88.168	1.00	29.39
6809	CA	ARG	B	99	-30.689	-6.910	87.182	1.00	29.98
6810	CB	ARG	B	99	-30.312	-5.467	87.417	1.00	30.83
6811	CG	ARG	B	99	-29.466	-4.866	86.315	1.00	31.29
6812	CD	ARG	B	99	-28.821	-3.579	86.759	1.00	33.85
6813	NE	ARG	B	99	-29.819	-2.565	87.063	1.00	35.27
6814	CZ	ARG	B	99	-30.299	-1.733	86.152	1.00	36.76
6815	NH1	ARG	B	99	-29.860	-1.832	84.897	1.00	36.31
6816	NH2	ARG	B	99	-31.207	-0.812	86.483	1.00	34.65
6817	C	ARG	B	99	-29.428	-7.755	87.182	1.00	30.65
6818	O	ARG	B	99	-28.776	-7.897	86.138	1.00	30.42
6819	N	HIS	B	100	-29.068	-8.302	88.348	1.00	30.49
6820	CA	HIS	B	100	-27.835	-9.080	88.446	1.00	30.33
6821	CB	HIS	B	100	-26.832	-8.458	89.439	1.00	29.88
6822	CG	HIS	B	100	-26.496	-7.031	89.151	1.00	30.52
6823	ND1	HIS	B	100	-25.635	-6.657	88.142	1.00	31.38
6824	CE1	HIS	B	100	-25.526	-5.338	88.124	1.00	30.86

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3ED**

A	B	C	D	E	F	G	H	I	J
6825	NE2	HIS	B	138	-26.284	-4.844	89.087	1.00	30.38
6826	CD2	HIS	B	138	-26.903	-5.881	89.744	1.00	30.25
6827	C	HIS	B	138	-28.152	-10.479	88.890	1.00	30.15
6828	O	HIS	B	138	-27.505	-11.423	88.467	1.00	30.34
6829	N	SER	B	139	-29.149	-10.603	89.753	1.00	30.24
6830	CA	SER	B	139	-29.505	-11.889	90.311	1.00	30.82
6831	CB	SER	B	139	-30.405	-11.711	91.531	1.00	30.55
6832	OG	SER	B	139	-31.571	-10.973	91.193	1.00	31.73
6833	C	SER	B	139	-30.205	-12.801	89.313	1.00	31.14
6834	O	SER	B	139	-30.886	-12.347	88.393	1.00	30.27
6835	N	TYR	B	140	-30.039	-14.097	89.536	1.00	32.33
6836	CA	TYR	B	140	-30.678	-15.117	88.726	1.00	33.64
6837	CB	TYR	B	140	-30.112	-15.152	87.308	1.00	33.16
6838	CG	TYR	B	140	-28.653	-15.523	87.213	1.00	32.32
6839	CD1	TYR	B	140	-28.248	-16.854	87.199	1.00	31.87
6840	CE1	TYR	B	140	-26.908	-17.191	87.082	1.00	31.29
6841	CZ	TYR	B	140	-25.970	-16.189	86.985	1.00	31.61
6842	OH	TYR	B	140	-24.636	-16.496	86.884	1.00	33.08
6843	CE2	TYR	B	140	-26.350	-14.867	86.990	1.00	31.84
6844	CD2	TYR	B	140	-27.679	-14.539	87.107	1.00	31.76
6845	C	TYR	B	140	-30.451	-16.455	89.376	1.00	34.99
6846	O	TYR	B	140	-29.503	-16.636	90.138	1.00	35.19
6847	N	THR	B	141	-31.333	-17.386	89.053	1.00	35.94
6848	CA	THR	B	141	-31.259	-18.732	89.557	1.00	37.26
6849	CB	THR	B	141	-32.659	-19.120	90.044	1.00	37.50
6850	OG1	THR	B	141	-32.692	-18.991	91.474	1.00	39.59
6851	CG2	THR	B	141	-32.936	-20.568	89.817	1.00	37.87
6852	C	THR	B	141	-30.711	-19.665	88.458	1.00	37.49
6853	O	THR	B	141	-30.814	-19.348	87.269	1.00	37.12
6854	N	ALA	B	142	-30.094	-20.785	88.845	1.00	37.83
6855	CA	ALA	B	142	-29.508	-21.679	87.849	1.00	38.47
6856	CB	ALA	B	142	-28.405	-20.973	87.096	1.00	38.13
6857	C	ALA	B	142	-28.981	-23.002	88.376	1.00	39.12
6858	O	ALA	B	142	-28.700	-23.158	89.569	1.00	40.13
6859	N	SER	B	143	-28.844	-23.958	87.463	1.00	39.45
6860	CA	SER	B	143	-28.279	-25.265	87.784	1.00	38.93
6861	CB	SER	B	143	-28.967	-26.388	87.000	1.00	38.72
6862	OG	SER	B	143	-30.289	-26.612	87.469	1.00	37.35
6863	C	SER	B	143	-26.812	-25.186	87.430	1.00	39.17
6864	O	SER	B	143	-26.407	-24.335	86.644	1.00	38.98
6865	N	TYR	B	144	-26.017	-26.061	88.030	1.00	39.50
6866	CA	TYR	B	144	-24.587	-26.032	87.826	1.00	40.02
6867	CB	TYR	B	144	-23.906	-25.222	88.939	1.00	39.62
6868	CG	TYR	B	144	-24.238	-23.756	88.900	1.00	37.80
6869	CD1	TYR	B	144	-25.313	-23.249	89.613	1.00	35.67
6870	CE1	TYR	B	144	-25.624	-21.926	89.563	1.00	34.50
6871	CZ	TYR	B	144	-24.861	-21.084	88.782	1.00	34.06
6872	OH	TYR	B	144	-25.145	-19.752	88.730	1.00	36.54
6873	CE2	TYR	B	144	-23.805	-21.557	88.064	1.00	35.43
6874	CD2	TYR	B	144	-23.499	-22.887	88.117	1.00	36.64
6875	C	TYR	B	144	-23.996	-27.418	87.828	1.00	40.90

FIGURE 3 EE

A	B	C	D	E	F	G	H	I	J
6876	O	TYR	B	144	-24.373	-28.273	88.614	1.00	40.67
6877	N	ASP	B	145	-23.063	-27.639	86.926	1.00	42.17
6878	CA	ASP	B	145	-22.315	-28.867	86.957	1.00	43.53
6879	CB	ASP	B	145	-22.827	-29.878	85.936	1.00	43.46
6880	CG	ASP	B	145	-24.093	-30.557	86.412	1.00	44.94
6881	OD1	ASP	B	145	-23.981	-31.578	87.121	1.00	46.31
6882	OD2	ASP	B	145	-25.245	-30.121	86.176	1.00	46.24
6883	C	ASP	B	145	-20.869	-28.474	86.785	1.00	44.26
6884	O	ASP	B	145	-20.556	-27.418	86.240	1.00	44.38
6885	N	ILE	B	146	-19.998	-29.304	87.324	1.00	45.38
6886	CA	ILE	B	146	-18.583	-29.033	87.323	1.00	46.41
6887	CB	ILE	B	146	-18.060	-29.125	88.771	1.00	46.40
6888	CG1	ILE	B	146	-18.833	-28.147	89.671	1.00	45.78
6889	CD1	ILE	B	146	-18.561	-28.314	91.151	1.00	44.16
6890	CG2	ILE	B	146	-16.566	-28.900	88.811	1.00	45.32
6891	C	ILE	B	146	-17.921	-30.080	86.460	1.00	47.16
6892	O	ILE	B	146	-18.187	-31.264	86.609	1.00	47.27
6893	N	TYR	B	147	-17.072	-29.632	85.550	1.00	48.10
6894	CA	TYR	B	147	-16.373	-30.529	84.655	1.00	49.27
6895	CB	TYR	B	147	-16.543	-30.057	83.207	1.00	49.41
6896	CG	TYR	B	147	-16.012	-31.006	82.156	1.00	49.74
6897	CD1	TYR	B	147	-16.617	-32.232	81.928	1.00	50.27
6898	CE1	TYR	B	147	-16.143	-33.098	80.968	1.00	50.21
6899	CZ	TYR	B	147	-15.052	-32.742	80.213	1.00	50.72
6900	OH	TYR	B	147	-14.575	-33.604	79.255	1.00	51.51
6901	CE2	TYR	B	147	-14.435	-31.529	80.410	1.00	51.16
6902	CD2	TYR	B	147	-14.917	-30.667	81.380	1.00	50.92
6903	C	TYR	B	147	-14.902	-30.554	85.023	1.00	50.04
6904	O	TYR	B	147	-14.260	-29.504	85.144	1.00	49.43
6905	N	ASP	B	148	-14.382	-31.762	85.217	1.00	51.21
6906	CA	ASP	B	148	-12.966	-31.953	85.498	1.00	52.87
6907	CB	ASP	B	148	-12.739	-33.336	86.108	1.00	53.03
6908	CG	ASP	B	148	-11.404	-33.455	86.801	1.00	52.86
6909	OD1	ASP	B	148	-10.387	-33.066	86.185	1.00	52.39
6910	OD2	ASP	B	148	-11.276	-33.931	87.953	1.00	52.82
6911	C	ASP	B	148	-12.228	-31.823	84.170	1.00	53.82
6912	O	ASP	B	148	-12.520	-32.564	83.241	1.00	54.01
6913	N	LEU	B	149	-11.296	-30.878	84.071	1.00	55.10
6914	CA	LEU	B	149	-10.588	-30.636	82.813	1.00	56.51
6915	CB	LEU	B	149	-9.883	-29.279	82.828	1.00	56.48
6916	CG	LEU	B	149	-10.773	-28.033	82.785	1.00	56.39
6917	CD1	LEU	B	149	-11.350	-27.840	81.411	1.00	55.96
6918	CD2	LEU	B	149	-9.981	-26.811	83.194	1.00	56.60
6919	C	LEU	B	149	-9.580	-31.711	82.450	1.00	57.82
6920	O	LEU	B	149	-9.385	-32.009	81.270	1.00	58.49
6921	N	ASN	B	150	-8.918	-32.280	83.451	1.00	59.18
6922	CA	ASN	B	150	-7.915	-33.303	83.172	1.00	60.19
6923	CB	ASN	B	150	-6.714	-33.190	84.117	1.00	60.53
6924	CG	ASN	B	150	-5.614	-32.284	83.556	1.00	62.30
6925	OD1	ASN	B	150	-4.745	-32.736	82.791	1.00	62.20
6926	ND2	ASN	B	150	-5.649	-30.997	83.930	1.00	63.29

FIGURE 3 EF

A	B	C	D	E	F	G	H	I	J
6927	C	ASN	B	112	-8.495	-34.715	83.115	1.00	60.34
6928	O	ASN	B	112	-8.107	-35.511	82.264	1.00	60.68
6929	N	LYS	B	113	-9.423	-35.035	84.008	1.00	60.48
6930	CA	LYS	B	113	-10.118	-36.313	83.905	1.00	60.64
6931	CB	LYS	B	113	-10.844	-36.657	85.205	1.00	60.83
6932	CG	LYS	B	113	-10.004	-37.066	86.413	1.00	62.13
6933	CD	LYS	B	113	-10.942	-37.688	87.465	1.00	64.05
6934	CE	LYS	B	113	-10.416	-37.589	88.902	1.00	66.34
6935	NZ	LYS	B	113	-9.645	-38.801	89.354	1.00	67.59
6936	C	LYS	B	113	-11.191	-36.148	82.832	1.00	60.46
6937	O	LYS	B	113	-11.993	-37.053	82.601	1.00	60.41
6938	N	ARG	B	114	-11.190	-34.995	82.165	1.00	60.17
6939	CA	ARG	B	114	-12.316	-34.606	81.314	1.00	60.11
6940	CB	ARG	B	114	-11.994	-34.453	79.816	1.00	60.21
6941	CG	ARG	B	114	-10.813	-35.185	79.235	1.00	61.19
6942	CD	ARG	B	114	-10.360	-34.544	77.918	1.00	62.98
6943	NE	ARG	B	114	-11.468	-33.807	77.302	1.00	64.76
6944	CZ	ARG	B	114	-11.630	-32.481	77.350	1.00	65.35
6945	NH1	ARG	B	114	-10.744	-31.708	77.969	1.00	66.06
6946	NH2	ARG	B	114	-12.685	-31.923	76.771	1.00	64.96
6947	C	ARG	B	114	-13.610	-35.388	81.568	1.00	59.77
6948	O	ARG	B	114	-14.127	-36.073	80.692	1.00	59.60
6949	N	GLN	B	115	-14.136	-35.246	82.780	1.00	59.44
6950	CA	GLN	B	115	-15.370	-35.914	83.165	1.00	59.28
6951	CB	GLN	B	115	-15.078	-37.228	83.892	1.00	59.10
6952	CG	GLN	B	115	-15.056	-38.431	82.967	1.00	59.99
6953	CD	GLN	B	115	-14.836	-39.744	83.704	1.00	60.27
6954	OE1	GLN	B	115	-14.169	-39.776	84.747	1.00	58.63
6955	NE2	GLN	B	115	-15.394	-40.829	83.164	1.00	60.16
6956	C	GLN	B	115	-16.287	-35.036	84.009	1.00	58.99
6957	O	GLN	B	115	-15.839	-34.154	84.739	1.00	59.02
6958	N	LEU	B	116	-17.581	-35.297	83.903	1.00	58.68
6959	CA	LEU	B	116	-18.575	-34.542	84.632	1.00	58.46
6960	CB	LEU	B	116	-19.923	-34.710	83.942	1.00	58.33
6961	CG	LEU	B	116	-20.862	-33.510	83.813	1.00	58.73
6962	CD1	LEU	B	116	-21.899	-33.821	82.741	1.00	57.81
6963	CD2	LEU	B	116	-20.089	-32.234	83.466	1.00	57.82
6964	C	LEU	B	116	-18.666	-35.070	86.054	1.00	58.39
6965	O	LEU	B	116	-19.117	-36.195	86.274	1.00	58.73
6966	N	ILE	B	117	-18.229	-34.293	87.032	1.00	57.82
6967	CA	ILE	B	117	-18.391	-34.772	88.391	1.00	57.41
6968	CB	ILE	B	117	-18.017	-33.702	89.414	1.00	57.29
6969	CG1	ILE	B	117	-16.519	-33.757	89.702	1.00	57.24
6970	CD1	ILE	B	117	-15.655	-33.406	88.533	1.00	56.98
6971	CG2	ILE	B	117	-18.786	-33.919	90.706	1.00	56.69
6972	C	ILE	B	117	-19.858	-35.143	88.508	1.00	57.25
6973	O	ILE	B	117	-20.719	-34.360	88.128	1.00	57.34
6974	N	THR	B	118	-20.147	-36.348	88.989	1.00	57.01
6975	CA	THR	B	118	-21.532	-36.788	89.134	1.00	56.55
6976	CB	THR	B	118	-21.791	-38.055	88.312	1.00	56.71
6977	OG1	THR	B	118	-20.921	-39.100	88.771	1.00	56.05

FIGURE 3 EG

A	B	C	D	E	F	G	H	I	J
6978	CG2	THR	B	118	-21.387	-37.839	86.857	1.00	56.38
6979	C	THR	B	118	-21.827	-37.078	90.586	1.00	56.40
6980	O	THR	B	118	-22.859	-37.649	90.926	1.00	56.71
6981	N	GLU	B	119	-20.902	-36.694	91.448	1.00	56.00
6982	CA	GLU	B	119	-21.063	-36.923	92.868	1.00	55.83
6983	CB	GLU	B	119	-19.891	-37.765	93.396	1.00	56.17
6984	CG	GLU	B	119	-19.526	-38.945	92.500	1.00	57.93
6985	CD	GLU	B	119	-18.218	-39.614	92.891	1.00	60.54
6986	OE1	GLU	B	119	-17.174	-38.922	92.958	1.00	60.51
6987	OE2	GLU	B	119	-18.233	-40.844	93.130	1.00	62.65
6988	C	GLU	B	119	-21.108	-35.570	93.569	1.00	55.02
6989	O	GLU	B	119	-20.341	-34.673	93.240	1.00	54.89
6990	N	GLU	B	120	-22.021	-35.419	94.517	1.00	54.26
6991	CA	GLU	B	120	-22.074	-34.198	95.304	1.00	53.96
6992	CB	GLU	B	120	-20.765	-34.036	96.075	1.00	54.29
6993	CG	GLU	B	120	-20.763	-34.643	97.469	1.00	56.02
6994	CD	GLU	B	120	-22.065	-35.326	97.851	1.00	58.53
6995	OE1	GLU	B	120	-22.027	-36.523	98.226	1.00	58.50
6996	OE2	GLU	B	120	-23.129	-34.659	97.806	1.00	59.72
6997	C	GLU	B	120	-22.325	-32.967	94.441	1.00	52.94
6998	O	GLU	B	120	-21.706	-31.922	94.634	1.00	53.11
6999	N	ARG	B	121	-23.241	-33.105	93.494	1.00	51.55
7000	CA	ARG	B	121	-23.581	-32.028	92.581	1.00	50.21
7001	CB	ARG	B	121	-24.596	-32.536	91.547	1.00	50.55
7002	CG	ARG	B	121	-24.025	-33.534	90.533	1.00	51.61
7003	CD	ARG	B	121	-25.071	-34.250	89.676	1.00	52.90
7004	NE	ARG	B	121	-25.728	-33.354	88.726	1.00	54.69
7005	CZ	ARG	B	121	-26.849	-33.649	88.072	1.00	55.41
7006	NH1	ARG	B	121	-27.442	-34.821	88.261	1.00	56.17
7007	NH2	ARG	B	121	-27.383	-32.774	87.229	1.00	55.38
7008	C	ARG	B	121	-24.147	-30.810	93.305	1.00	48.76
7009	O	ARG	B	121	-24.804	-30.932	94.329	1.00	48.32
7010	N	ILE	B	122	-23.877	-29.633	92.758	1.00	47.49
7011	CA	ILE	B	122	-24.439	-28.393	93.269	1.00	46.10
7012	CB	ILE	B	122	-23.831	-27.210	92.510	1.00	46.08
7013	CG1	ILE	B	122	-22.351	-27.091	92.871	1.00	44.41
7014	CD1	ILE	B	122	-21.581	-26.147	92.013	1.00	43.82
7015	CG2	ILE	B	122	-24.581	-25.917	92.815	1.00	45.57
7016	C	ILE	B	122	-25.942	-28.472	93.058	1.00	45.48
7017	O	ILE	B	122	-26.392	-28.918	92.018	1.00	45.33
7018	N	PRO	B	123	-26.725	-28.056	94.044	1.00	45.04
7019	CA	PRO	B	123	-28.186	-28.200	93.968	1.00	44.70
7020	CB	PRO	B	123	-28.668	-27.694	95.333	1.00	44.69
7021	CG	PRO	B	123	-27.444	-27.543	96.176	1.00	44.44
7022	CD	PRO	B	123	-26.281	-27.390	95.277	1.00	44.63
7023	C	PRO	B	123	-28.804	-27.345	92.869	1.00	44.69
7024	O	PRO	B	123	-28.191	-26.384	92.411	1.00	44.61
7025	N	ASN	B	124	-30.005	-27.718	92.444	1.00	44.83
7026	CA	ASN	B	124	-30.756	-26.949	91.464	1.00	44.83
7027	CB	ASN	B	124	-31.930	-27.771	90.895	1.00	45.24
7028	CG	ASN	B	124	-31.488	-28.820	89.852	1.00	46.78

FIGURE 3 EH

A	B	C	D	E	F	G	H	I	J
7029	OD1	ASN	B	124	-30.545	-28.609	89.086	1.00	46.82
7030	ND2	ASN	B	124	-32.183	-29.951	89.826	1.00	51.91
7031	C	ASN	B	124	-31.267	-25.709	92.195	1.00	44.27
7032	O	ASN	B	124	-31.258	-25.674	93.435	1.00	44.24
7033	N	ASN	B	125	-31.707	-24.700	91.443	1.00	42.84
7034	CA	ASN	B	125	-32.204	-23.463	92.038	1.00	41.49
7035	CB	ASN	B	125	-33.499	-23.695	92.826	1.00	41.55
7036	CG	ASN	B	125	-34.585	-24.378	91.988	1.00	42.05
7037	OD1	ASN	B	125	-34.849	-25.575	92.150	1.00	41.18
7038	ND2	ASN	B	125	-35.223	-23.615	91.100	1.00	40.95
7039	C	ASN	B	125	-31.160	-22.801	92.926	1.00	40.69
7040	O	ASN	B	125	-31.486	-22.187	93.946	1.00	40.65
7041	N	THR	B	126	-29.900	-22.936	92.532	1.00	39.37
7042	CA	THR	B	126	-28.803	-22.297	93.234	1.00	37.95
7043	CB	THR	B	126	-27.470	-22.964	92.857	1.00	37.98
7044	OG1	THR	B	126	-27.427	-24.281	93.425	1.00	38.33
7045	CG2	THR	B	126	-26.287	-22.245	93.495	1.00	36.03
7046	C	THR	B	126	-28.788	-20.811	92.888	1.00	37.31
7047	O	THR	B	126	-28.852	-20.425	91.721	1.00	37.04
7048	N	GLN	B	127	-28.688	-19.988	93.922	1.00	36.34
7049	CA	GLN	B	127	-28.750	-18.553	93.786	1.00	34.92
7050	CB	GLN	B	127	-29.300	-17.967	95.080	1.00	34.94
7051	CG	GLN	B	127	-30.650	-18.559	95.437	1.00	33.55
7052	CD	GLN	B	127	-30.989	-18.453	96.916	1.00	32.92
7053	OE1	GLN	B	127	-30.300	-19.048	97.761	1.00	31.14
7054	NE2	GLN	B	127	-32.066	-17.725	97.232	1.00	26.86
7055	C	GLN	B	127	-27.435	-17.907	93.400	1.00	35.02
7056	O	GLN	B	127	-27.420	-16.786	92.882	1.00	35.11
7057	N	TRP	B	128	-26.328	-18.606	93.607	1.00	34.94
7058	CA	TRP	B	128	-25.023	-18.019	93.295	1.00	34.86
7059	CB	TRP	B	128	-24.850	-16.732	94.091	1.00	34.91
7060	CG	TRP	B	128	-23.622	-16.029	93.737	1.00	36.11
7061	CD1	TRP	B	128	-22.448	-16.054	94.420	1.00	37.36
7062	NE1	TRP	B	128	-21.512	-15.288	93.768	1.00	39.73
7063	CE2	TRP	B	128	-22.077	-14.756	92.640	1.00	37.82
7064	CD2	TRP	B	128	-23.406	-15.204	92.589	1.00	36.92
7065	CE3	TRP	B	128	-24.204	-14.796	91.522	1.00	37.01
7066	CZ3	TRP	B	128	-23.664	-13.971	90.566	1.00	37.97
7067	CH2	TRP	B	128	-22.337	-13.547	90.642	1.00	38.55
7068	CZ2	TRP	B	128	-21.529	-13.923	91.673	1.00	38.95
7069	C	TRP	B	128	-23.831	-18.947	93.580	1.00	34.89
7070	O	TRP	B	128	-23.821	-19.684	94.556	1.00	34.10
7071	N	VAL	B	129	-22.814	-18.878	92.735	1.00	35.22
7072	CA	VAL	B	129	-21.641	-19.718	92.894	1.00	36.27
7073	CB	VAL	B	129	-21.650	-20.924	91.923	1.00	36.44
7074	CG1	VAL	B	129	-22.979	-21.647	91.958	1.00	35.53
7075	CE2	VAL	B	129	-20.506	-21.876	92.259	1.00	36.07
7076	C	VAL	B	129	-20.397	-18.930	92.570	1.00	36.85
7077	O	VAL	B	129	-20.363	-18.203	91.590	1.00	36.67
7078	N	THR	B	130	-19.365	-19.070	93.391	1.00	38.07
7079	CA	THR	B	130	-18.110	-18.405	93.097	1.00	39.09

FIGURE 3 EI

A	B	C	D	E	F	G	H	I	J
7080	CB	THR	B	130	-18.055	-16.988	93.726	1.00	39.16
7081	OG1	THR	B	130	-16.698	-16.512	93.767	1.00	39.50
7082	CG2	THR	B	130	-18.459	-17.029	95.170	1.00	38.85
7083	C	THR	B	130	-16.925	-19.254	93.529	1.00	40.29
7084	O	THR	B	130	-16.907	-19.819	94.619	1.00	39.97
7085	N	TRP	B	131	-15.949	-19.351	92.633	1.00	41.63
7086	CA	TRP	B	131	-14.710	-20.056	92.894	1.00	42.33
7087	CB	TRP	B	131	-13.844	-20.063	91.629	1.00	42.18
7088	CG	TRP	B	131	-14.321	-20.989	90.566	1.00	42.06
7089	CD1	TRP	B	131	-14.758	-20.654	89.322	1.00	41.70
7090	NE1	TRP	B	131	-15.122	-21.782	88.630	1.00	41.69
7091	CE2	TRP	B	131	-14.902	-22.880	89.423	1.00	40.84
7092	CD2	TRP	B	131	-14.399	-22.415	90.650	1.00	40.74
7093	CE3	TRP	B	131	-14.093	-23.348	91.644	1.00	39.43
7094	CZ3	TRP	B	131	-14.306	-24.676	91.393	1.00	40.01
7095	CH2	TRP	B	131	-14.812	-25.108	90.157	1.00	39.68
7096	CZ2	TRP	B	131	-15.112	-24.226	89.164	1.00	38.53
7097	C	TRP	B	131	-13.941	-19.286	93.944	1.00	43.25
7098	O	TRP	B	131	-14.234	-18.124	94.224	1.00	43.84
7099	N	SER	B	132	-12.945	-19.947	94.513	1.00	43.68
7100	CA	SER	B	132	-11.971	-19.320	95.379	1.00	44.11
7101	CB	SER	B	132	-11.098	-20.425	95.960	1.00	44.06
7102	OG	SER	B	132	-10.138	-19.911	96.860	1.00	47.01
7103	C	SER	B	132	-11.143	-18.457	94.431	1.00	43.83
7104	O	SER	B	132	-11.057	-18.779	93.257	1.00	44.43
7105	N	PRO	B	133	-10.527	-17.374	94.887	1.00	43.67
7106	CA	PRO	B	133	-9.717	-16.553	93.985	1.00	43.66
7107	CB	PRO	B	133	-9.345	-15.348	94.850	1.00	43.91
7108	CG	PRO	B	133	-10.322	-15.376	95.955	1.00	43.41
7109	CD	PRO	B	133	-10.555	-16.824	96.247	1.00	43.61
7110	C	PRO	B	133	-8.459	-17.285	93.519	1.00	43.78
7111	O	PRO	B	133	-7.808	-16.837	92.583	1.00	43.86
7112	N	VAL	B	134	-8.114	-18.380	94.186	1.00	43.75
7113	CA	VAL	B	134	-6.991	-19.217	93.789	1.00	43.61
7114	CB	VAL	B	134	-5.730	-18.897	94.583	1.00	43.86
7115	CG1	VAL	B	134	-5.211	-17.508	94.250	1.00	44.28
7116	CG2	VAL	B	134	-6.005	-19.016	96.067	1.00	44.26
7117	C	VAL	B	134	-7.381	-20.653	94.072	1.00	43.56
7118	O	VAL	B	134	-8.178	-20.909	94.967	1.00	43.88
7119	N	GLY	B	135	-6.834	-21.597	93.314	1.00	43.50
7120	CA	GLY	B	135	-7.178	-22.990	93.506	1.00	42.57
7121	C	GLY	B	135	-8.539	-23.284	92.907	1.00	42.42
7122	O	GLY	B	135	-8.846	-22.832	91.806	1.00	42.51
7123	N	HIS	B	136	-9.371	-24.031	93.623	1.00	41.88
7124	CA	HIS	B	136	-10.669	-24.399	93.083	1.00	41.28
7125	CB	HIS	B	136	-10.556	-25.635	92.205	1.00	41.09
7126	CG	HIS	B	136	-9.837	-26.762	92.865	1.00	41.42
7127	ND1	HIS	B	136	-8.475	-26.936	92.756	1.00	41.80
7128	CE1	HIS	B	136	-8.113	-27.995	93.457	1.00	43.07
7129	NE2	HIS	B	136	-9.188	-28.501	94.034	1.00	42.44
7130	CD2	HIS	B	136	-10.280	-27.747	93.680	1.00	41.18



FIGURE 3 EJ

A	B	C	D	E	F	G	H	I	J
7131	C	HIS	B	136	-11.668	-24.674	94.168	1.00	41.24
7132	O	HIS	B	136	-12.519	-25.568	94.030	1.00	41.24
7133	N	LYS	B	137	-11.558	-23.930	95.262	1.00	41.14
7134	CA	LYS	B	137	-12.547	-24.032	96.320	1.00	41.09
7135	CB	LYS	B	137	-12.096	-23.305	97.583	1.00	41.89
7136	CG	LYS	B	137	-11.586	-24.250	98.657	1.00	43.47
7137	CD	LYS	B	137	-10.276	-23.772	99.244	1.00	46.36
7138	CE	LYS	B	137	-10.460	-22.700	100.280	1.00	48.20
7139	NZ	LYS	B	137	-9.125	-22.281	100.849	1.00	48.67
7140	C	LYS	B	137	-13.805	-23.420	95.762	1.00	40.13
7141	O	LYS	B	137	-13.753	-22.688	94.789	1.00	39.54
7142	N	LEU	B	138	-14.928	-23.702	96.401	1.00	39.56
7143	CA	LEU	B	138	-16.208	-23.294	95.882	1.00	38.74
7144	CB	LEU	B	138	-16.834	-24.522	95.237	1.00	39.10
7145	CG	LEU	B	138	-17.667	-24.421	93.977	1.00	38.93
7146	CD1	LEU	B	138	-17.088	-23.365	93.050	1.00	38.82
7147	CD2	LEU	B	138	-17.641	-25.774	93.319	1.00	38.89
7148	C	LEU	B	138	-17.163	-22.812	96.960	1.00	38.21
7149	O	LEU	B	138	-17.330	-23.470	97.984	1.00	38.26
7150	N	ALA	B	139	-17.811	-21.678	96.721	1.00	37.04
7151	CA	ALA	B	139	-18.859	-21.213	97.619	1.00	36.37
7152	CB	ALA	B	139	-18.436	-19.952	98.361	1.00	36.36
7153	C	ALA	B	139	-20.131	-20.948	96.819	1.00	36.06
7154	O	ALA	B	139	-20.096	-20.375	95.729	1.00	35.33
7155	N	TYR	B	140	-21.259	-21.370	97.360	1.00	35.69
7156	CA	TYR	B	140	-22.506	-21.084	96.698	1.00	35.56
7157	CB	TYR	B	140	-22.873	-22.217	95.734	1.00	35.62
7158	CG	TYR	B	140	-23.103	-23.556	96.382	1.00	35.36
7159	CD1	TYR	B	140	-24.330	-23.875	96.914	1.00	34.83
7160	CE1	TYR	B	140	-24.558	-25.095	97.495	1.00	35.07
7161	CZ	TYR	B	140	-23.549	-26.024	97.562	1.00	34.69
7162	OH	TYR	B	140	-23.814	-27.241	98.153	1.00	35.30
7163	CE2	TYR	B	140	-22.312	-25.741	97.043	1.00	34.31
7164	CD2	TYR	B	140	-22.090	-24.512	96.448	1.00	35.31
7165	C	TYR	B	140	-23.604	-20.800	97.718	1.00	35.80
7166	O	TYR	B	140	-23.451	-21.080	98.909	1.00	36.15
7167	N	VAL	B	141	-24.685	-20.189	97.256	1.00	35.67
7168	CA	VAL	B	141	-25.833	-19.930	98.099	1.00	35.40
7169	CB	VAL	B	141	-26.234	-18.454	98.082	1.00	35.38
7170	CG1	VAL	B	141	-25.072	-17.591	98.465	1.00	33.53
7171	CG2	VAL	B	141	-27.423	-18.215	99.009	1.00	35.48
7172	C	VAL	B	141	-26.995	-20.732	97.558	1.00	35.92
7173	O	VAL	B	141	-27.207	-20.794	96.351	1.00	35.98
7174	N	TRP	B	142	-27.757	-21.342	98.446	1.00	36.11
7175	CA	TRP	B	142	-28.895	-22.119	98.019	1.00	37.00
7176	CB	TRP	B	142	-28.480	-23.562	97.725	1.00	37.45
7177	CG	TRP	B	142	-29.609	-24.447	97.413	1.00	37.97
7178	CD1	TRP	B	142	-30.222	-24.594	96.201	1.00	38.04
7179	NE1	TRP	B	142	-31.229	-25.526	96.292	1.00	38.64
7180	CE2	TRP	B	142	-31.290	-25.991	97.583	1.00	39.67
7181	CD2	TRP	B	142	-30.279	-25.330	98.315	1.00	38.37

FIGURE 3 EK

A	B	C	D	E	F	G	H	I	J
7182	CE3	TRP	B	142	-30.124	-25.638	99.669	1.00	39.69
7183	CZ3	TRP	B	142	-30.976	-26.576	100.252	1.00	40.58
7184	CH2	TRP	B	142	-31.974	-27.217	99.495	1.00	41.69
7185	CZ2	TRP	B	142	-32.148	-26.935	98.162	1.00	40.31
7186	C	TRP	B	142	-29.908	-22.061	99.135	1.00	37.18
7187	O	TRP	B	142	-29.584	-22.362	100.293	1.00	37.62
7188	N	ASN	B	143	-31.123	-21.653	98.786	1.00	37.09
7189	CA	ASN	B	143	-32.174	-21.440	99.760	1.00	37.10
7190	CB	ASN	B	143	-32.571	-22.744	100.448	1.00	37.49
7191	CG	ASN	B	143	-33.440	-23.631	99.568	1.00	39.31
7192	OD1	ASN	B	143	-33.526	-24.843	99.785	1.00	42.68
7193	ND2	ASN	B	143	-34.098	-23.032	98.577	1.00	39.54
7194	C	ASN	B	143	-31.722	-20.398	100.773	1.00	36.82
7195	O	ASN	B	143	-32.004	-20.504	101.960	1.00	36.76
7196	N	ASN	B	144	-31.021	-19.387	100.277	1.00	36.79
7197	CA	ASN	B	144	-30.531	-18.280	101.093	1.00	37.18
7198	CB	ASN	B	144	-31.686	-17.568	101.805	1.00	37.04
7199	CG	ASN	B	144	-32.527	-16.720	100.861	1.00	36.49
7200	OD1	ASN	B	144	-32.660	-17.030	99.683	1.00	36.40
7201	ND2	ASN	B	144	-33.097	-15.648	101.384	1.00	33.59
7202	C	ASN	B	144	-29.424	-18.637	102.100	1.00	37.55
7203	O	ASN	B	144	-29.026	-17.798	102.899	1.00	38.80
7204	N	ASP	B	145	-28.926	-19.866	102.065	1.00	37.04
7205	CA	ASP	B	145	-27.830	-20.248	102.949	1.00	36.79
7206	CB	ASP	B	145	-28.196	-21.497	103.756	1.00	36.52
7207	CG	ASP	B	145	-28.965	-21.169	105.012	1.00	35.95
7208	OD1	ASP	B	145	-29.946	-21.885	105.300	1.00	35.23
7209	OD2	ASP	B	145	-28.672	-20.211	105.760	1.00	32.55
7210	C	ASP	B	145	-26.527	-20.488	102.172	1.00	36.81
7211	O	ASP	B	145	-26.548	-20.828	100.997	1.00	36.71
7212	N	ILE	B	146	-25.398	-20.304	102.843	1.00	37.17
7213	CA	ILE	B	146	-24.088	-20.514	102.234	1.00	37.41
7214	CB	ILE	B	146	-23.088	-19.527	102.804	1.00	37.34
7215	CG1	ILE	B	146	-23.598	-18.102	102.588	1.00	36.66
7216	CD1	ILE	B	146	-22.768	-17.054	103.237	1.00	34.03
7217	CG2	ILE	B	146	-21.717	-19.733	102.183	1.00	37.74
7218	C	ILE	B	146	-23.574	-21.936	102.431	1.00	37.89
7219	O	ILE	B	146	-23.890	-22.610	103.415	1.00	37.80
7220	N	TYR	B	147	-22.799	-22.393	101.458	1.00	38.32
7221	CA	TYR	B	147	-22.210	-23.717	101.482	1.00	38.55
7222	CB	TYR	B	147	-23.031	-24.678	100.647	1.00	38.37
7223	CG	TYR	B	147	-24.367	-25.068	101.217	1.00	37.96
7224	CD1	TYR	B	147	-24.534	-26.268	101.908	1.00	37.11
7225	CE1	TYR	B	147	-25.785	-26.638	102.412	1.00	36.57
7226	CZ	TYR	B	147	-26.874	-25.799	102.213	1.00	36.57
7227	OH	TYR	B	147	-28.122	-26.146	102.695	1.00	38.30
7228	CE2	TYR	B	147	-26.728	-24.622	101.523	1.00	34.92
7229	CD2	TYR	B	147	-25.486	-24.265	101.022	1.00	37.48
7230	C	TYR	B	147	-20.828	-23.622	100.867	1.00	38.87
7231	O	TYR	B	147	-20.585	-22.784	100.002	1.00	39.06
7232	N	VAL	B	148	-19.919	-24.479	101.310	1.00	39.44

FIGURE 3 EL

A	B	C	D	E	F	G	H	I	J
7233	CA	VAL	B	148	-18.588	-24.488	100.737	1.00	39.71
7234	CB	VAL	B	148	-17.509	-24.035	101.718	1.00	39.96
7235	CG1	VAL	B	148	-16.147	-24.369	101.142	1.00	39.51
7236	CG2	VAL	B	148	-17.633	-22.535	102.015	1.00	39.81
7237	C	VAL	B	148	-18.201	-25.872	100.305	1.00	40.21
7238	O	VAL	B	148	-18.543	-26.857	100.956	1.00	40.48
7239	N	LYS	B	149	-17.480	-25.930	99.194	1.00	40.45
7240	CA	LYS	B	149	-16.926	-27.163	98.696	1.00	40.77
7241	CB	LYS	B	149	-17.494	-27.502	97.320	1.00	40.78
7242	CG	LYS	B	149	-18.834	-28.181	97.370	1.00	41.22
7243	CD	LYS	B	149	-19.360	-28.458	95.982	1.00	42.84
7244	CE	LYS	B	149	-20.033	-29.816	95.943	1.00	44.11
7245	NZ	LYS	B	149	-20.861	-30.062	97.161	1.00	44.71
7246	C	LYS	B	149	-15.436	-26.937	98.601	1.00	40.97
7247	O	LYS	B	149	-14.981	-26.041	97.888	1.00	41.10
7248	N	ILE	B	150	-14.674	-27.725	99.349	1.00	41.46
7249	CA	ILE	B	150	-13.227	-27.625	99.293	1.00	41.98
7250	CB	ILE	B	150	-12.589	-28.239	100.543	1.00	42.06
7251	CG1	ILE	B	150	-12.546	-27.196	101.656	1.00	42.77
7252	CD1	ILE	B	150	-13.585	-26.106	101.539	1.00	41.99
7253	CG2	ILE	B	150	-11.154	-28.660	100.263	1.00	42.89
7254	C	ILE	B	150	-12.790	-28.312	98.018	1.00	41.88
7255	O	ILE	B	150	-11.875	-27.873	97.345	1.00	41.45
7256	N	GLU	B	151	-13.488	-29.379	97.669	1.00	42.89
7257	CA	GLU	B	151	-13.240	-30.049	96.401	1.00	44.16
7258	CB	GLU	B	151	-12.493	-31.373	96.603	1.00	44.31
7259	CG	GLU	B	151	-11.200	-31.253	97.409	1.00	45.63
7260	CD	GLU	B	151	-10.025	-30.739	96.600	1.00	48.28
7261	OE1	GLU	B	151	-10.010	-30.951	95.373	1.00	50.02
7262	OE2	GLU	B	151	-9.108	-30.119	97.191	1.00	50.10
7263	C	GLU	B	151	-14.570	-30.247	95.682	1.00	44.43
7264	O	GLU	B	151	-15.577	-30.594	96.289	1.00	44.13
7265	N	PRO	B	152	-14.570	-30.022	94.381	1.00	45.23
7266	CA	PRO	B	152	-15.802	-30.091	93.594	1.00	46.07
7267	CB	PRO	B	152	-15.297	-29.979	92.158	1.00	45.96
7268	CG	PRO	B	152	-14.015	-29.226	92.275	1.00	45.42
7269	CD	PRO	B	152	-13.395	-29.684	93.558	1.00	45.23
7270	C	PRO	B	152	-16.602	-31.381	93.794	1.00	47.12
7271	O	PRO	B	152	-17.834	-31.353	93.728	1.00	46.89
7272	N	ASN	B	153	-15.919	-32.492	94.057	1.00	48.20
7273	CA	ASN	B	153	-16.609	-33.771	94.186	1.00	49.06
7274	CB	ASN	B	153	-15.790	-34.881	93.532	1.00	49.32
7275	CG	ASN	B	153	-14.711	-35.406	94.437	1.00	50.49
7276	OD1	ASN	B	153	-13.528	-35.102	94.267	1.00	51.24
7277	ND2	ASN	B	153	-15.111	-36.197	95.420	1.00	53.07
7278	C	ASN	B	153	-16.967	-34.162	95.615	1.00	49.43
7279	O	ASN	B	153	-17.598	-35.188	95.842	1.00	49.74
7280	N	LEU	B	154	-16.591	-33.336	96.579	1.00	49.88
7281	CA	LEU	B	154	-16.837	-33.669	97.973	1.00	50.21
7282	CB	LEU	B	154	-15.667	-33.186	98.826	1.00	50.44
7283	CG	LEU	B	154	-14.568	-34.191	99.167	1.00	51.03

FIGURE 3 EM

A	B	C	D	E	F	G	H	I	J
7284	CD1	LEU	B	154	-14.481	-35.297	98.128	1.00	52.56
7285	CD2	LEU	B	154	-13.248	-33.473	99.285	1.00	52.12
7286	C	LEU	B	154	-18.140	-33.088	98.514	1.00	50.42
7287	O	LEU	B	154	-18.656	-32.090	98.007	1.00	50.74
7288	N	PRO	B	155	-18.679	-33.720	99.545	1.00	50.30
7289	CA	PRO	B	155	-19.869	-33.204	100.222	1.00	50.05
7290	CB	PRO	B	155	-19.971	-34.090	101.469	1.00	50.11
7291	CG	PRO	B	155	-18.609	-34.742	101.564	1.00	50.65
7292	CD	PRO	B	155	-18.220	-34.988	100.135	1.00	50.55
7293	C	PRO	B	155	-19.633	-31.748	100.608	1.00	49.51
7294	O	PRO	B	155	-18.479	-31.344	100.783	1.00	49.41
7295	N	SER	B	156	-20.711	-30.982	100.736	1.00	48.74
7296	CA	SER	B	156	-20.619	-29.547	101.005	1.00	48.18
7297	CB	SER	B	156	-21.763	-28.792	100.302	1.00	48.05
7298	OG	SER	B	156	-21.415	-28.458	98.966	1.00	48.05
7299	C	SER	B	156	-20.640	-29.189	102.486	1.00	47.66
7300	O	SER	B	156	-21.240	-29.875	103.312	1.00	47.05
7301	N	TYR	B	157	-19.988	-28.082	102.803	1.00	47.22
7302	CA	TYR	B	157	-19.999	-27.568	104.149	1.00	46.94
7303	CB	TYR	B	157	-18.635	-27.003	104.502	1.00	47.36
7304	CG	TYR	B	157	-17.554	-28.046	104.612	1.00	48.59
7305	CD1	TYR	B	157	-17.462	-28.869	105.728	1.00	50.51
7306	CE1	TYR	B	157	-16.455	-29.820	105.837	1.00	50.88
7307	CZ	TYR	B	157	-15.540	-29.944	104.823	1.00	50.85
7308	OH	TYR	B	157	-14.535	-30.872	104.903	1.00	53.46
7309	CE2	TYR	B	157	-15.616	-29.137	103.710	1.00	51.19
7310	CD2	TYR	B	157	-16.613	-28.198	103.610	1.00	49.46
7311	C	TYR	B	157	-21.049	-26.472	104.233	1.00	46.22
7312	O	TYR	B	157	-20.942	-25.441	103.572	1.00	45.77
7313	N	ARG	B	158	-22.065	-26.720	105.047	1.00	45.42
7314	CA	ARG	B	158	-23.137	-25.775	105.279	1.00	44.92
7315	CB	ARG	B	158	-24.279	-26.497	105.999	1.00	45.11
7316	CG	ARG	B	158	-25.641	-26.404	105.373	1.00	45.98
7317	CD	ARG	B	158	-26.622	-25.478	106.084	1.00	48.49
7318	NE	ARG	B	158	-27.943	-26.099	106.177	1.00	49.66
7319	CZ	ARG	B	158	-29.096	-25.446	106.138	1.00	50.00
7320	NH1	ARG	B	158	-29.117	-24.134	106.009	1.00	50.42
7321	NH2	ARG	B	158	-30.235	-26.114	106.235	1.00	49.94
7322	C	ARG	B	158	-22.591	-24.689	106.189	1.00	44.40
7323	O	ARG	B	158	-22.266	-24.964	107.341	1.00	44.02
7324	N	ILE	B	159	-22.469	-23.463	105.686	1.00	43.84
7325	CA	ILE	B	159	-22.002	-22.368	106.532	1.00	43.13
7326	CB	ILE	B	159	-21.245	-21.305	105.711	1.00	43.15
7327	CG1	ILE	B	159	-20.127	-21.960	104.888	1.00	43.08
7328	CD1	ILE	B	159	-19.379	-23.072	105.610	1.00	40.50
7329	CG2	ILE	B	159	-20.678	-20.213	106.618	1.00	42.00
7330	C	ILE	B	159	-23.138	-21.742	107.356	1.00	43.24
7331	O	ILE	B	159	-22.978	-21.499	108.550	1.00	42.94
7332	N	THR	B	160	-24.295	-21.501	106.742	1.00	43.15
7333	CA	THR	B	160	-25.395	-20.882	107.485	1.00	43.07
7334	CB	THR	B	160	-25.738	-19.488	106.924	1.00	43.35

FIGURE 3 EN

A	B	C	D	E	F	G	H	I	J
7335	OG1	THR	B	160	-26.277	-19.612	105.594	1.00	43.35
7336	CG2	THR	B	160	-24.468	-18.671	106.732	1.00	42.11
7337	C	THR	B	160	-26.640	-21.743	107.564	1.00	43.24
7338	O	THR	B	160	-26.858	-22.633	106.747	1.00	43.71
7339	N	TRP	B	161	-27.467	-21.477	108.559	1.00	43.10
7340	CA	TRP	B	161	-28.651	-22.284	108.758	1.00	43.13
7341	CB	TRP	B	161	-28.448	-23.207	109.960	1.00	43.35
7342	CG	TRP	B	161	-27.335	-24.217	109.814	1.00	43.29
7343	CD1	TRP	B	161	-25.989	-23.984	109.894	1.00	41.69
7344	NE1	TRP	B	161	-25.295	-25.159	109.723	1.00	41.69
7345	CE2	TRP	B	161	-26.186	-26.182	109.538	1.00	42.31
7346	CD2	TRP	B	161	-27.483	-25.623	109.587	1.00	42.81
7347	CE3	TRP	B	161	-28.582	-26.471	109.431	1.00	42.85
7348	CZ3	TRP	B	161	-28.356	-27.825	109.217	1.00	44.59
7349	CH2	TRP	B	161	-27.050	-28.345	109.167	1.00	43.07
7350	CZ2	TRP	B	161	-25.959	-27.539	109.317	1.00	42.07
7351	C	TRP	B	161	-29.854	-21.399	109.020	1.00	43.23
7352	O	TRP	B	161	-30.892	-21.876	109.460	1.00	43.49
7353	N	THR	B	162	-29.716	-20.109	108.758	1.00	43.00
7354	CA	THR	B	162	-30.786	-19.171	109.071	1.00	43.22
7355	CB	THR	B	162	-30.197	-17.990	109.819	1.00	42.86
7356	OG1	THR	B	162	-29.199	-17.384	108.996	1.00	43.09
7357	CG2	THR	B	162	-29.402	-18.485	111.017	1.00	42.82
7358	C	THR	B	162	-31.558	-18.665	107.847	1.00	43.08
7359	O	THR	B	162	-32.638	-18.098	107.984	1.00	42.87
7360	N	GLY	B	163	-30.984	-18.860	106.665	1.00	43.22
7361	CA	GLY	B	163	-31.609	-18.446	105.429	1.00	43.32
7362	C	GLY	B	163	-33.107	-18.688	105.430	1.00	43.53
7363	O	GLY	B	163	-33.571	-19.799	105.714	1.00	43.50
7364	N	LYS	B	164	-33.862	-17.636	105.122	1.00	43.32
7365	CA	LYS	B	164	-35.318	-17.719	105.067	1.00	43.66
7366	CB	LYS	B	164	-35.924	-17.290	106.404	1.00	43.86
7367	CG	LYS	B	164	-37.444	-17.402	106.460	1.00	45.67
7368	CD	LYS	B	164	-37.970	-17.337	107.897	1.00	47.17
7369	CE	LYS	B	164	-39.497	-17.471	107.904	1.00	49.52
7370	NZ	LYS	B	164	-40.097	-17.520	109.267	1.00	48.85
7371	C	LYS	B	164	-35.859	-16.855	103.920	1.00	43.13
7372	O	LYS	B	164	-35.777	-15.629	103.963	1.00	42.90
7373	N	GLU	B	165	-36.390	-17.509	102.894	1.00	42.88
7374	CA	GLU	B	165	-36.916	-16.827	101.707	1.00	42.75
7375	CB	GLU	B	165	-37.875	-17.769	100.970	1.00	42.89
7376	CG	GLU	B	165	-38.447	-17.218	99.675	1.00	46.01
7377	CD	GLU	B	165	-39.346	-18.229	98.978	1.00	50.75
7378	OE1	GLU	B	165	-40.426	-18.572	99.533	1.00	50.41
7379	OE2	GLU	B	165	-38.962	-18.695	97.876	1.00	53.37
7380	C	GLU	B	165	-37.602	-15.488	102.044	1.00	41.49
7381	O	GLU	B	165	-38.538	-15.456	102.823	1.00	41.12
7382	N	ASN	B	166	-37.108	-14.392	101.473	1.00	40.30
7383	CA	ASN	B	166	-37.662	-13.053	101.719	1.00	39.57
7384	CB	ASN	B	166	-39.179	-13.017	101.491	1.00	39.43
7385	CG	ASN	B	166	-39.571	-13.312	100.046	1.00	38.77

FIGURE 3 EO

A	B	C	D	E	F	G	H	I	J
7386	OD1	ASN	B	166	-38.892	-12.895	99.108	1.00	39.24
7387	ND2	ASN	B	166	-40.675	-14.037	99.867	1.00	36.86
7388	C	ASN	B	166	-37.363	-12.425	103.084	1.00	39.44
7389	O	ASN	B	166	-37.652	-11.249	103.302	1.00	39.64
7390	N	ILE	B	167	-36.804	-13.194	104.010	1.00	38.55
7391	CA	ILE	B	167	-36.523	-12.651	105.326	1.00	37.72
7392	CB	ILE	B	167	-37.297	-13.426	106.415	1.00	38.14
7393	CG1	ILE	B	167	-38.801	-13.239	106.216	1.00	38.62
7394	CD1	ILE	B	167	-39.452	-14.349	105.474	1.00	40.55
7395	CG2	ILE	B	167	-36.927	-12.924	107.796	1.00	37.27
7396	C	ILE	B	167	-35.035	-12.593	105.631	1.00	36.78
7397	O	ILE	B	167	-34.502	-11.529	105.876	1.00	37.09
7398	N	ILE	B	168	-34.356	-13.730	105.594	1.00	35.88
7399	CA	ILE	B	168	-32.934	-13.748	105.899	1.00	34.97
7400	CB	ILE	B	168	-32.696	-14.591	107.179	1.00	35.66
7401	CG1	ILE	B	168	-33.226	-13.809	108.393	1.00	35.90
7402	CD1	ILE	B	168	-33.721	-14.673	109.511	1.00	40.18
7403	CG2	ILE	B	168	-31.223	-14.947	107.326	1.00	34.03
7404	C	ILE	B	168	-32.105	-14.239	104.730	1.00	34.18
7405	O	ILE	B	168	-32.317	-15.343	104.234	1.00	34.01
7406	N	TYR	B	169	-31.193	-13.391	104.265	1.00	33.65
7407	CA	TYR	B	169	-30.309	-13.715	103.147	1.00	33.38
7408	CB	TYR	B	169	-30.335	-12.621	102.083	1.00	33.36
7409	CG	TYR	B	169	-31.679	-12.194	101.564	1.00	34.51
7410	CD1	TYR	B	169	-32.566	-11.521	102.382	1.00	35.15
7411	CE1	TYR	B	169	-33.790	-11.087	101.908	1.00	36.27
7412	CZ	TYR	B	169	-34.146	-11.307	100.585	1.00	36.51
7413	OH	TYR	B	169	-35.384	-10.858	100.163	1.00	37.33
7414	CE2	TYR	B	169	-33.278	-11.968	99.731	1.00	34.96
7415	CD2	TYR	B	169	-32.036	-12.398	100.224	1.00	34.82
7416	C	TYR	B	169	-28.860	-13.828	103.622	1.00	33.08
7417	O	TYR	B	169	-28.336	-12.899	104.240	1.00	32.88
7418	N	ASN	B	170	-28.217	-14.952	103.321	1.00	32.60
7419	CA	ASN	B	170	-26.826	-15.171	103.688	1.00	32.11
7420	CB	ASN	B	170	-26.657	-16.482	104.471	1.00	32.23
7421	CG	ASN	B	170	-27.415	-16.513	105.776	1.00	32.33
7422	OD1	ASN	B	170	-28.356	-17.289	105.932	1.00	33.34
7423	ND2	ASN	B	170	-26.990	-15.703	106.735	1.00	30.14
7424	C	ASN	B	170	-26.025	-15.327	102.420	1.00	31.44
7425	O	ASN	B	170	-26.245	-16.282	101.685	1.00	31.22
7426	N	GLY	B	171	-25.084	-14.430	102.164	1.00	30.91
7427	CA	GLY	B	171	-24.249	-14.552	100.982	1.00	30.57
7428	C	GLY	B	171	-24.806	-13.905	99.713	1.00	30.67
7429	O	GLY	B	171	-24.083	-13.797	98.726	1.00	29.92
7430	N	ILE	B	172	-26.080	-13.487	99.746	1.00	30.45
7431	CA	ILE	B	172	-26.711	-12.764	98.642	1.00	30.45
7432	CB	ILE	B	172	-27.703	-13.666	97.892	1.00	30.43
7433	CG1	ILE	B	172	-28.635	-14.358	98.899	1.00	29.88
7434	CD1	ILE	B	172	-29.746	-15.140	98.262	1.00	28.11
7435	CG2	ILE	B	172	-26.966	-14.647	97.004	1.00	28.79
7436	C	ILE	B	172	-27.476	-11.553	99.155	1.00	30.70

FIGURE 3 EP

A	B	C	D	E	F	G	H	I	J
7437	O	ILE	B	172	-27.952	-11.533	100.288	1.00	31.56
7438	N	THR	B	173	-27.638	-10.546	98.314	1.00	30.54
7439	CA	THR	B	173	-28.366	-9.353	98.730	1.00	30.17
7440	CB	THR	B	173	-27.998	-8.248	97.790	1.00	30.29
7441	OG1	THR	B	173	-27.995	-8.776	96.451	1.00	30.15
7442	CG2	THR	B	173	-26.544	-7.836	98.045	1.00	29.43
7443	C	THR	B	173	-29.883	-9.516	98.695	1.00	30.13
7444	O	THR	B	173	-30.395	-10.516	98.181	1.00	30.07
7445	N	ASP	B	174	-30.603	-8.531	99.245	1.00	29.15
7446	CA	ASP	B	174	-32.053	-8.480	99.078	1.00	28.13
7447	CB	ASP	B	174	-32.750	-7.944	100.324	1.00	28.31
7448	CG	ASP	B	174	-32.454	-6.485	100.570	1.00	29.05
7449	OD1	ASP	B	174	-33.182	-5.855	101.372	1.00	30.08
7450	OD2	ASP	B	174	-31.529	-5.875	99.997	1.00	28.42
7451	C	ASP	B	174	-32.238	-7.533	97.911	1.00	27.65
7452	O	ASP	B	174	-31.253	-7.141	97.298	1.00	27.19
7453	N	TRP	B	175	-33.469	-7.127	97.596	1.00	27.54
7454	CA	TRP	B	175	-33.648	-6.240	96.432	1.00	26.79
7455	CB	TRP	B	175	-35.128	-5.926	96.122	1.00	26.14
7456	CG	TRP	B	175	-35.261	-5.307	94.757	1.00	23.48
7457	CD1	TRP	B	175	-35.570	-5.953	93.586	1.00	22.72
7458	NE1	TRP	B	175	-35.566	-5.065	92.535	1.00	22.62
7459	CE2	TRP	B	175	-35.271	-3.815	93.010	1.00	22.14
7460	CD2	TRP	B	175	-35.068	-3.930	94.407	1.00	21.47
7461	CE3	TRP	B	175	-34.771	-2.780	95.130	1.00	19.92
7462	CZ3	TRP	B	175	-34.657	-1.568	94.456	1.00	20.93
7463	CH2	TRP	B	175	-34.855	-1.484	93.079	1.00	20.31
7464	CZ2	TRP	B	175	-35.169	-2.600	92.335	1.00	22.25
7465	C	TRP	B	175	-32.834	-4.947	96.415	1.00	27.04
7466	O	TRP	B	175	-32.199	-4.653	95.409	1.00	27.07
7467	N	VAL	B	176	-32.878	-4.141	97.481	1.00	27.37
7468	CA	VAL	B	176	-32.150	-2.856	97.437	1.00	27.70
7469	CB	VAL	B	176	-32.408	-1.918	98.659	1.00	27.94
7470	CG1	VAL	B	176	-32.922	-2.697	99.840	1.00	29.41
7471	CG2	VAL	B	176	-33.313	-0.812	98.284	1.00	27.83
7472	C	VAL	B	176	-30.653	-2.978	97.412	1.00	27.07
7473	O	VAL	B	176	-29.988	-2.183	96.788	1.00	27.17
7474	N	TYR	B	177	-30.107	-3.924	98.152	1.00	27.06
7475	CA	TYR	B	177	-28.672	-4.032	98.169	1.00	27.84
7476	CB	TYR	B	177	-28.214	-5.024	99.239	1.00	28.15
7477	CG	TYR	B	177	-27.918	-4.360	100.567	1.00	29.10
7478	CD1	TYR	B	177	-28.941	-4.117	101.506	1.00	27.32
7479	CE1	TYR	B	177	-28.665	-3.513	102.711	1.00	28.33
7480	CZ	TYR	B	177	-27.354	-3.134	102.987	1.00	29.96
7481	OH	TYR	B	177	-27.032	-2.521	104.161	1.00	30.14
7482	CE2	TYR	B	177	-26.343	-3.360	102.081	1.00	29.19
7483	CD2	TYR	B	177	-26.630	-3.964	100.877	1.00	27.15
7484	C	TYR	B	177	-28.184	-4.404	96.779	1.00	28.36
7485	O	TYR	B	177	-27.234	-3.808	96.246	1.00	28.11
7486	N	GLU	B	178	-28.859	-5.360	96.162	1.00	28.62
7487	CA	GLU	B	178	-28.408	-5.767	94.847	1.00	29.47

FIGURE 3 EQ

A	B	C	D	E	F	G	H	I	J
7488	CB	GLU	B	178	-29.292	-6.858	94.256	1.00	29.15
7489	CG	GLU	B	178	-28.905	-7.190	92.826	1.00	27.91
7490	CD	GLU	B	178	-29.890	-8.149	92.182	1.00	25.71
7491	OE1	GLU	B	178	-29.962	-8.151	90.942	1.00	27.31
7492	OE2	GLU	B	178	-30.607	-8.860	92.919	1.00	22.10
7493	C	GLU	B	178	-28.376	-4.584	93.908	1.00	29.85
7494	O	GLU	B	178	-27.340	-4.295	93.295	1.00	29.77
7495	N	GLU	B	179	-29.507	-3.881	93.833	1.00	30.44
7496	CA	GLU	B	179	-29.677	-2.804	92.872	1.00	31.04
7497	CB	GLU	B	179	-31.182	-2.541	92.624	1.00	31.33
7498	CG	GLU	B	179	-31.470	-1.322	91.739	1.00	30.44
7499	CD	GLU	B	179	-31.039	-1.563	90.307	1.00	30.62
7500	OE1	GLU	B	179	-30.843	-2.753	89.978	1.00	31.34
7501	OE2	GLU	B	179	-30.893	-0.592	89.518	1.00	30.02
7502	C	GLU	B	179	-29.002	-1.493	93.218	1.00	31.78
7503	O	GLU	B	179	-28.433	-0.844	92.353	1.00	31.90
7504	N	GLU	B	180	-29.082	-1.078	94.474	1.00	32.62
7505	CA	GLU	B	180	-28.608	0.252	94.824	1.00	33.58
7506	CB	GLU	B	180	-29.726	1.019	95.554	1.00	33.44
7507	CG	GLU	B	180	-31.081	0.966	94.860	1.00	33.23
7508	CD	GLU	B	180	-31.194	1.925	93.687	1.00	33.27
7509	OE1	GLU	B	180	-30.149	2.442	93.233	1.00	34.14
7510	OE2	GLU	B	180	-32.332	2.176	93.219	1.00	33.57
7511	C	GLU	B	180	-27.326	0.323	95.644	1.00	34.47
7512	O	GLU	B	180	-26.507	1.220	95.454	1.00	34.81
7513	N	VAL	B	181	-27.164	-0.586	96.590	1.00	35.56
7514	CA	VAL	B	181	-25.974	-0.539	97.430	1.00	36.34
7515	CB	VAL	B	181	-26.227	-1.164	98.786	1.00	36.64
7516	CG1	VAL	B	181	-25.010	-0.997	99.674	1.00	37.55
7517	CG2	VAL	B	181	-27.453	-0.505	99.439	1.00	36.85
7518	C	VAL	B	181	-24.795	-1.202	96.749	1.00	36.58
7519	O	VAL	B	181	-23.817	-0.538	96.422	1.00	37.02
7520	N	PHE	B	182	-24.895	-2.495	96.467	1.00	37.09
7521	CA	PHE	B	182	-23.768	-3.189	95.838	1.00	36.97
7522	CB	PHE	B	182	-23.741	-4.671	96.207	1.00	36.58
7523	CG	PHE	B	182	-23.482	-4.936	97.663	1.00	37.39
7524	CD1	PHE	B	182	-23.257	-3.900	98.552	1.00	37.49
7525	CE1	PHE	B	182	-23.029	-4.147	99.903	1.00	37.26
7526	CZ	PHE	B	182	-23.019	-5.423	100.375	1.00	36.96
7527	CE2	PHE	B	182	-23.237	-6.474	99.499	1.00	39.17
7528	CD2	PHE	B	182	-23.467	-6.225	98.147	1.00	38.10
7529	C	PHE	B	182	-23.679	-3.028	94.328	1.00	37.24
7530	O	PHE	B	182	-22.641	-2.621	93.814	1.00	38.18
7531	N	SER	B	183	-24.778	-3.319	93.632	1.00	37.49
7532	CA	SER	B	183	-24.842	-3.392	92.167	1.00	36.70
7533	CB	SER	B	183	-23.933	-2.400	91.452	1.00	36.88
7534	CG	SER	B	183	-24.612	-1.194	91.161	1.00	36.34
7535	C	SER	B	183	-24.453	-4.790	91.769	1.00	36.58
7536	O	SER	B	183	-23.849	-5.010	90.710	1.00	37.26
7537	N	ALA	B	184	-24.798	-5.738	92.627	1.00	35.60
7538	CA	ALA	B	184	-24.502	-7.127	92.372	1.00	34.98



FIGURE 3 ER

A	B	C	D	E	F	G	H	I	J
7539	CB	ALA	B	184	-23.043	-7.420	92.640	1.00	35.69
7540	C	ALA	B	184	-25.358	-7.935	93.300	1.00	34.68
7541	O	ALA	B	184	-25.841	-7.420	94.299	1.00	35.13
7542	N	TYR	B	185	-25.535	-9.203	92.969	1.00	33.68
7543	CA	TYR	B	185	-26.319	-10.103	93.784	1.00	33.79
7544	CB	TYR	B	185	-26.744	-11.285	92.938	1.00	32.72
7545	CG	TYR	B	185	-27.789	-12.180	93.562	1.00	32.50
7546	CD1	TYR	B	185	-27.894	-13.511	93.171	1.00	29.63
7547	CE1	TYR	B	185	-28.841	-14.325	93.684	1.00	28.92
7548	CZ	TYR	B	185	-29.733	-13.849	94.606	1.00	29.80
7549	OH	TYR	B	185	-30.679	-14.731	95.083	1.00	30.48
7550	CE2	TYR	B	185	-29.680	-12.535	95.029	1.00	28.44
7551	CD2	TYR	B	185	-28.706	-11.694	94.494	1.00	29.79
7552	C	TYR	B	185	-25.489	-10.648	94.934	1.00	34.13
7553	O	TYR	B	185	-25.965	-10.738	96.065	1.00	34.82
7554	N	SER	B	186	-24.261	-11.037	94.607	1.00	34.52
7555	CA	SER	B	186	-23.329	-11.672	95.530	1.00	34.83
7556	CB	SER	B	186	-22.044	-12.048	94.792	1.00	34.59
7557	OG	SER	B	186	-21.192	-12.841	95.610	1.00	35.38
7558	C	SER	B	186	-22.962	-10.808	96.719	1.00	35.02
7559	O	SER	B	186	-22.658	-9.625	96.571	1.00	34.94
7560	N	ALA	B	187	-23.005	-11.410	97.900	1.00	35.25
7561	CA	ALA	B	187	-22.539	-10.744	99.103	1.00	36.21
7562	CB	ALA	B	187	-23.704	-10.353	100.023	1.00	36.09
7563	C	ALA	B	187	-21.576	-11.691	99.809	1.00	36.77
7564	O	ALA	B	187	-21.650	-11.877	101.025	1.00	36.72
7565	N	LEU	B	188	-20.699	-12.302	99.014	1.00	37.09
7566	CA	LEU	B	188	-19.643	-13.173	99.496	1.00	37.64
7567	CB	LEU	B	188	-19.822	-14.586	98.934	1.00	38.66
7568	CG	LEU	B	188	-20.919	-15.422	99.586	1.00	38.66
7569	CD1	LEU	B	188	-21.101	-16.710	98.849	1.00	40.07
7570	CD2	LEU	B	188	-20.528	-15.704	100.998	1.00	40.71
7571	C	LEU	B	188	-18.334	-12.584	98.988	1.00	37.53
7572	O	LEU	B	188	-18.279	-12.115	97.854	1.00	38.18
7573	N	TRP	B	189	-17.286	-12.582	99.815	1.00	37.05
7574	CA	TRP	B	189	-15.995	-12.040	99.391	1.00	36.44
7575	CB	TRP	B	189	-15.833	-10.602	99.891	1.00	36.28
7576	CG	TRP	B	189	-16.914	-9.648	99.454	1.00	36.18
7577	CD1	TRP	B	189	-16.895	-8.832	98.355	1.00	36.04
7578	NE1	TRP	B	189	-18.049	-8.089	98.295	1.00	35.31
7579	CE2	TRP	B	189	-18.850	-8.427	99.353	1.00	35.02
7580	CD2	TRP	B	189	-18.164	-9.399	100.109	1.00	35.13
7581	CE3	TRP	B	189	-18.777	-9.904	101.263	1.00	35.16
7582	CZ3	TRP	B	189	-20.025	-9.422	101.624	1.00	34.26
7583	CH2	TRP	B	189	-20.674	-8.449	100.853	1.00	35.25
7584	CZ2	TRP	B	189	-20.105	-7.941	99.717	1.00	34.68
7585	C	TRP	B	189	-14.826	-12.892	99.899	1.00	36.59
7586	O	TRP	B	189	-14.435	-12.786	101.065	1.00	36.63
7587	N	TRP	B	190	-14.280	-13.746	99.034	1.00	36.22
7588	CA	TRP	B	190	-13.158	-14.614	99.411	1.00	35.36
7589	CB	TRP	B	190	-12.765	-15.539	98.260	1.00	34.95

FIGURE 3 ES

A	B	C	D	E	F	G	H	I	J
7590	CG	TRP	B	190	-13.627	-16.753	98.036	1.00	34.74
7591	CD1	TRP	B	190	-14.552	-16.926	97.046	1.00	33.53
7592	NE1	TRP	B	190	-15.123	-18.172	97.137	1.00	34.28
7593	CE2	TRP	B	190	-14.561	-18.844	98.190	1.00	34.02
7594	CD2	TRP	B	190	-13.607	-17.981	98.778	1.00	34.82
7595	CE3	TRP	B	190	-12.880	-18.443	99.880	1.00	35.18
7596	CZ3	TRP	B	190	-13.135	-19.714	100.363	1.00	35.47
7597	CH2	TRP	B	190	-14.094	-20.542	99.753	1.00	36.43
7598	CZ2	TRP	B	190	-14.812	-20.123	98.669	1.00	33.78
7599	C	TRP	B	190	-11.921	-13.810	99.731	1.00	35.35
7600	O	TRP	B	190	-11.610	-12.839	99.025	1.00	34.85
7601	N	SER	B	191	-11.196	-14.218	100.775	1.00	34.91
7602	CA	SER	B	191	-9.906	-13.599	101.044	1.00	35.16
7603	CB	SER	B	191	-9.284	-14.137	102.347	1.00	35.21
7604	OG	SER	B	191	-9.135	-15.553	102.340	1.00	33.94
7605	C	SER	B	191	-9.052	-13.923	99.805	1.00	35.52
7606	O	SER	B	191	-9.329	-14.893	99.097	1.00	34.63
7607	N	PRO	B	192	-8.021	-13.136	99.536	1.00	36.13
7608	CA	PRO	B	192	-7.250	-13.316	98.303	1.00	37.16
7609	CB	PRO	B	192	-6.095	-12.328	98.454	1.00	36.92
7610	CG	PRO	B	192	-6.617	-11.298	99.386	1.00	36.51
7611	CD	PRO	B	192	-7.507	-12.026	100.352	1.00	36.33
7612	C	PRO	B	192	-6.757	-14.741	98.054	1.00	37.97
7613	O	PRO	B	192	-6.767	-15.179	96.905	1.00	38.49
7614	N	ASN	B	193	-6.357	-15.471	99.080	1.00	38.89
7615	CA	ASN	B	193	-5.880	-16.828	98.821	1.00	39.87
7616	CB	ASN	B	193	-4.494	-17.080	99.435	1.00	40.26
7617	CG	ASN	B	193	-4.543	-17.313	100.926	1.00	41.85
7618	OD1	ASN	B	193	-5.612	-17.455	101.519	1.00	42.23
7619	ND2	ASN	B	193	-3.366	-17.365	101.543	1.00	48.05
7620	C	ASN	B	193	-6.877	-17.910	99.193	1.00	39.93
7621	O	ASN	B	193	-6.537	-19.100	99.236	1.00	40.09
7622	N	GLY	B	194	-8.109	-17.478	99.466	1.00	40.22
7623	CA	GLY	B	194	-9.222	-18.373	99.728	1.00	39.55
7624	C	GLY	B	194	-9.309	-18.912	101.137	1.00	39.45
7625	O	GLY	B	194	-10.154	-19.772	101.440	1.00	39.26
7626	N	THR	B	195	-8.437	-18.443	102.017	1.00	39.14
7627	CA	THR	B	195	-8.505	-18.953	103.382	1.00	39.39
7628	CB	THR	B	195	-7.321	-18.457	104.222	1.00	39.64
7629	OG1	THR	B	195	-6.129	-19.138	103.795	1.00	41.03
7630	CG2	THR	B	195	-7.492	-18.901	105.677	1.00	39.46
7631	C	THR	B	195	-9.823	-18.557	104.029	1.00	39.04
7632	O	THR	B	195	-10.530	-19.385	104.615	1.00	39.15
7633	N	PHE	B	196	-10.170	-17.286	103.914	1.00	38.64
7634	CA	PHE	B	196	-11.400	-16.837	104.541	1.00	38.73
7635	CB	PHE	B	196	-11.143	-15.571	105.365	1.00	39.12
7636	CG	PHE	B	196	-10.179	-15.766	106.515	1.00	38.78
7637	CD1	PHE	B	196	-10.581	-16.387	107.677	1.00	39.07
7638	CE1	PHE	B	196	-9.695	-16.552	108.745	1.00	39.69
7639	CZ	PHE	B	196	-8.399	-16.083	108.653	1.00	38.45
7640	CE2	PHE	B	196	-7.986	-15.449	107.506	1.00	39.56

FIGURE 3 ET

A	B	C	D	E	F	G	H	I	J
7641	CD2	PHE	B	196	-8.876	-15.294	106.436	1.00	40.57
7642	C	PHE	B	196	-12.538	-16.608	103.540	1.00	38.22
7643	O	PHE	B	196	-12.301	-16.341	102.359	1.00	37.99
7644	N	LEU	B	197	-13.769	-16.780	104.018	1.00	37.58
7645	CA	LEU	B	197	-14.960	-16.417	103.260	1.00	36.62
7646	CB	LEU	B	197	-15.883	-17.610	103.053	1.00	36.67
7647	CG	LEU	B	197	-17.171	-17.316	102.275	1.00	35.82
7648	CD1	LEU	B	197	-18.028	-18.570	102.130	1.00	34.72
7649	CD2	LEU	B	197	-16.844	-16.752	100.911	1.00	35.59
7650	C	LEU	B	197	-15.681	-15.359	104.074	1.00	36.35
7651	O	LEU	B	197	-16.209	-15.636	105.150	1.00	36.69
7652	N	ALA	B	198	-15.672	-14.131	103.592	1.00	35.96
7653	CA	ALA	B	198	-16.378	-13.076	104.291	1.00	35.46
7654	CB	ALA	B	198	-15.689	-11.744	104.069	1.00	34.80
7655	C	ALA	B	198	-17.766	-13.069	103.671	1.00	35.25
7656	O	ALA	B	198	-17.911	-13.417	102.504	1.00	35.46
7657	N	TYR	B	199	-18.778	-12.686	104.438	1.00	34.76
7658	CA	TYR	B	199	-20.118	-12.551	103.885	1.00	34.75
7659	CB	TYR	B	199	-20.802	-13.915	103.750	1.00	34.69
7660	CG	TYR	B	199	-21.164	-14.595	105.049	1.00	34.33
7661	CD1	TYR	B	199	-22.431	-14.481	105.567	1.00	34.88
7662	CE1	TYR	B	199	-22.788	-15.115	106.741	1.00	34.48
7663	CZ	TYR	B	199	-21.863	-15.868	107.414	1.00	34.51
7664	OH	TYR	B	199	-22.249	-16.492	108.574	1.00	34.37
7665	CE2	TYR	B	199	-20.587	-16.002	106.917	1.00	33.81
7666	CD2	TYR	B	199	-20.244	-15.371	105.742	1.00	33.39
7667	C	TYR	B	199	-21.006	-11.591	104.682	1.00	35.01
7668	O	TYR	B	199	-20.736	-11.302	105.857	1.00	34.69
7669	N	ALA	B	200	-22.058	-11.106	104.023	1.00	34.47
7670	CA	ALA	B	200	-23.045	-10.246	104.649	1.00	34.12
7671	CB	ALA	B	200	-23.355	-9.061	103.760	1.00	33.97
7672	C	ALA	B	200	-24.290	-11.077	104.852	1.00	34.39
7673	O	ALA	B	200	-24.498	-12.068	104.151	1.00	34.15
7674	N	GLN	B	201	-25.096	-10.704	105.841	1.00	34.40
7675	CA	GLN	B	201	-26.373	-11.356	106.069	1.00	33.96
7676	CB	GLN	B	201	-26.377	-12.167	107.352	1.00	34.46
7677	CG	GLN	B	201	-27.724	-12.772	107.659	1.00	32.51
7678	CD	GLN	B	201	-27.834	-13.283	109.076	1.00	33.53
7679	OE1	GLN	B	201	-27.775	-14.507	109.314	1.00	33.56
7680	NE2	GLN	B	201	-28.019	-12.361	110.028	1.00	31.19
7681	C	GLN	B	201	-27.435	-10.274	106.163	1.00	34.27
7682	O	GLN	B	201	-27.296	-9.334	106.945	1.00	34.41
7683	N	PHE	B	202	-28.504	-10.414	105.383	1.00	34.03
7684	CA	PHE	B	202	-29.508	-9.366	105.324	1.00	33.58
7685	CB	PHE	B	202	-29.678	-8.875	103.876	1.00	32.92
7686	CG	PHE	B	202	-28.403	-8.329	103.267	1.00	31.65
7687	CD1	PHE	B	202	-28.003	-7.023	103.510	1.00	27.76
7688	CE1	PHE	B	202	-26.847	-6.536	102.961	1.00	27.18
7689	CZ	PHE	B	202	-26.045	-7.356	102.164	1.00	26.78
7690	CE2	PHE	B	202	-26.429	-8.647	101.922	1.00	27.05
7691	CD2	PHE	B	202	-27.597	-9.133	102.468	1.00	29.82

FIGURE 3 EU

A	B	C	D	E	F	G	H	I	J
7692	C	PHE	B	202	-30.814	-9.819	105.953	1.00	33.86
7693	O	PHE	B	202	-31.283	-10.925	105.738	1.00	34.06
7694	N	ASN	B	203	-31.382	-8.956	106.771	1.00	34.76
7695	CA	ASN	B	203	-32.612	-9.267	107.473	1.00	35.42
7696	CB	ASN	B	203	-32.397	-9.046	108.975	1.00	35.36
7697	CG	ASN	B	203	-33.549	-9.565	109.817	1.00	38.08
7698	OD1	ASN	B	203	-34.646	-9.813	109.311	1.00	39.09
7699	ND2	ASN	B	203	-33.308	-9.729	111.117	1.00	44.51
7700	C	ASN	B	203	-33.672	-8.325	106.926	1.00	35.44
7701	O	ASN	B	203	-33.517	-7.113	107.046	1.00	35.12
7702	N	ASP	B	204	-34.730	-8.870	106.319	1.00	35.37
7703	CA	ASP	B	204	-35.775	-8.040	105.705	1.00	36.12
7704	CB	ASP	B	204	-35.880	-8.318	104.199	1.00	36.29
7705	CG	ASP	B	204	-34.869	-7.543	103.398	1.00	35.99
7706	OD1	ASP	B	204	-33.668	-7.838	103.486	1.00	38.20
7707	OD2	ASP	B	204	-35.167	-6.602	102.666	1.00	35.99
7708	C	ASP	B	204	-37.135	-8.243	106.354	1.00	36.77
7709	O	ASP	B	204	-38.174	-7.885	105.799	1.00	36.63
7710	N	THR	B	205	-37.096	-8.818	107.546	1.00	37.26
7711	CA	THR	B	205	-38.255	-9.136	108.367	1.00	37.48
7712	CB	THR	B	205	-37.777	-9.252	109.815	1.00	37.68
7713	OG1	THR	B	205	-36.589	-10.057	109.849	1.00	39.08
7714	CG2	THR	B	205	-38.771	-10.014	110.661	1.00	37.50
7715	C	THR	B	205	-39.407	-8.141	108.311	1.00	37.68
7716	O	THR	B	205	-40.579	-8.525	108.135	1.00	38.26
7717	N	GLU	B	206	-39.102	-6.866	108.477	1.00	37.06
7718	CA	GLU	B	206	-40.190	-5.900	108.498	1.00	37.10
7719	CB	GLU	B	206	-40.222	-5.132	109.826	1.00	37.62
7720	CG	GLU	B	206	-40.662	-5.969	111.015	1.00	41.16
7721	CD	GLU	B	206	-40.329	-5.306	112.341	1.00	46.39
7722	OE1	GLU	B	206	-41.202	-4.586	112.887	1.00	47.55
7723	OE2	GLU	B	206	-39.190	-5.502	112.838	1.00	48.96
7724	C	GLU	B	206	-40.143	-4.930	107.339	1.00	35.80
7725	O	GLU	B	206	-40.781	-3.870	107.398	1.00	35.31
7726	N	VAL	B	207	-39.372	-5.244	106.295	1.00	34.51
7727	CA	VAL	B	207	-39.441	-4.350	105.150	1.00	33.14
7728	CB	VAL	B	207	-38.121	-4.217	104.303	1.00	33.75
7729	CG1	VAL	B	207	-38.263	-4.763	102.906	1.00	31.71
7730	CG2	VAL	B	207	-36.879	-4.758	105.070	1.00	32.67
7731	C	VAL	B	207	-40.709	-4.733	104.390	1.00	32.32
7732	O	VAL	B	207	-41.032	-5.918	104.242	1.00	31.19
7733	N	PRO	B	208	-41.486	-3.726	104.025	1.00	31.87
7734	CA	PRO	B	208	-42.766	-3.964	103.348	1.00	31.42
7735	CB	PRO	B	208	-43.375	-2.560	103.229	1.00	31.29
7736	CG	PRO	B	208	-42.630	-1.733	104.287	1.00	31.48
7737	CD	PRO	B	208	-41.219	-2.291	104.239	1.00	31.46
7738	C	PRO	B	208	-42.511	-4.546	101.979	1.00	30.79
7739	O	PRO	B	208	-41.451	-4.334	101.378	1.00	29.86
7740	N	LEU	B	209	-43.481	-5.301	101.499	1.00	30.64
7741	CA	LEU	B	209	-43.352	-5.921	100.189	1.00	30.83
7742	CB	LEU	B	209	-43.779	-7.388	100.262	1.00	31.12

FIGURE 3 EV

A	B	C	D	E	F	G	H	I	J
7743	CG	LEU	B	209	-42.801	-8.162	101.171	1.00	33.07
7744	CD1	LEU	B	209	-42.617	-9.617	100.757	1.00	33.85
7745	CD2	LEU	B	209	-43.238	-8.066	102.620	1.00	34.18
7746	C	LEU	B	209	-44.139	-5.177	99.130	1.00	29.88
7747	O	LEU	B	209	-45.274	-4.782	99.353	1.00	30.00
7748	N	ILE	B	210	-43.510	-4.948	97.986	1.00	29.02
7749	CA	ILE	B	210	-44.221	-4.408	96.863	1.00	27.71
7750	CB	ILE	B	210	-43.271	-3.741	95.860	1.00	27.81
7751	CG1	ILE	B	210	-44.040	-3.293	94.610	1.00	26.93
7752	CD1	ILE	B	210	-45.109	-2.253	94.857	1.00	24.74
7753	CG2	ILE	B	210	-42.135	-4.690	95.440	1.00	26.99
7754	C	ILE	B	210	-44.911	-5.632	96.263	1.00	27.48
7755	O	ILE	B	210	-44.317	-6.713	96.207	1.00	27.42
7756	N	GLU	B	211	-46.163	-5.467	95.851	1.00	26.30
7757	CA	GLU	B	211	-46.941	-6.555	95.265	1.00	25.53
7758	CB	GLU	B	211	-48.157	-6.895	96.134	1.00	25.38
7759	CG	GLU	B	211	-47.839	-7.241	97.577	1.00	27.67
7760	CD	GLU	B	211	-49.085	-7.608	98.369	1.00	30.61
7761	OE1	GLU	B	211	-49.242	-8.789	98.686	1.00	30.31
7762	OE2	GLU	B	211	-49.927	-6.717	98.673	1.00	34.16
7763	C	GLU	B	211	-47.417	-6.121	93.888	1.00	24.64
7764	O	GLU	B	211	-47.874	-4.997	93.713	1.00	23.65
7765	N	TYR	B	212	-47.280	-7.005	92.907	1.00	24.26
7766	CA	TYR	B	212	-47.770	-6.714	91.564	1.00	24.09
7767	CB	TYR	B	212	-46.768	-5.908	90.756	1.00	23.87
7768	CG	TYR	B	212	-45.395	-6.515	90.620	1.00	24.60
7769	CD1	TYR	B	212	-45.118	-7.426	89.624	1.00	22.59
7770	CE1	TYR	B	212	-43.872	-7.957	89.480	1.00	24.30
7771	CZ	TYR	B	212	-42.857	-7.574	90.333	1.00	25.32
7772	OH	TYR	B	212	-41.608	-8.119	90.198	1.00	23.27
7773	CE2	TYR	B	212	-43.094	-6.658	91.332	1.00	26.02
7774	CD2	TYR	B	212	-44.362	-6.135	91.471	1.00	25.60
7775	C	TYR	B	212	-48.177	-7.976	90.833	1.00	23.68
7776	O	TYR	B	212	-47.716	-9.062	91.158	1.00	24.00
7777	N	SER	B	213	-49.080	-7.833	89.879	1.00	23.67
7778	CA	SER	B	213	-49.553	-8.972	89.112	1.00	23.81
7779	CB	SER	B	213	-50.856	-8.639	88.400	1.00	23.52
7780	OG	SER	B	213	-51.949	-8.658	89.291	1.00	22.25
7781	C	SER	B	213	-48.524	-9.434	88.087	1.00	24.15
7782	O	SER	B	213	-47.827	-8.615	87.455	1.00	23.38
7783	N	PHE	B	214	-48.395	-10.755	87.980	1.00	24.01
7784	CA	PHE	B	214	-47.565	-11.359	86.938	1.00	23.87
7785	CB	PHE	B	214	-46.350	-12.083	87.486	1.00	23.47
7786	CG	PHE	B	214	-45.334	-12.351	86.441	1.00	22.91
7787	CD1	PHE	B	214	-45.334	-13.555	85.750	1.00	21.91
7788	CE1	PHE	B	214	-44.426	-13.780	84.733	1.00	22.86
7789	CZ	PHE	B	214	-43.508	-12.805	84.398	1.00	21.44
7790	CE2	PHE	B	214	-43.514	-11.604	85.080	1.00	23.24
7791	CD2	PHE	B	214	-44.432	-11.371	86.081	1.00	19.59
7792	C	PHE	B	214	-48.471	-12.308	86.185	1.00	24.16
7793	O	PHE	B	214	-49.007	-13.278	86.767	1.00	24.65

FIGURE 3 EW

A	B	C	D	E	F	G	H	I	J
7794	N	TYR	B	215	-48.677	-12.011	84.907	1.00	24.05
7795	CA	TYR	B	215	-49.688	-12.722	84.123	1.00	23.44
7796	CB	TYR	B	215	-50.289	-11.798	83.062	1.00	22.72
7797	CG	TYR	B	215	-50.831	-10.575	83.708	1.00	20.73
7798	CD1	TYR	B	215	-50.069	-9.414	83.794	1.00	19.55
7799	CE1	TYR	B	215	-50.557	-8.289	84.444	1.00	16.87
7800	CZ	TYR	B	215	-51.825	-8.330	85.006	1.00	17.23
7801	OH	TYR	B	215	-52.336	-7.212	85.644	1.00	17.71
7802	CE2	TYR	B	215	-52.590	-9.457	84.924	1.00	15.78
7803	CD2	TYR	B	215	-52.096	-10.578	84.285	1.00	19.58
7804	C	TYR	B	215	-49.171	-14.010	83.525	1.00	23.64
7805	O	TYR	B	215	-49.915	-14.987	83.417	1.00	23.38
7806	N	SER	B	216	-47.904	-13.998	83.131	1.00	23.88
7807	CA	SER	B	216	-47.240	-15.197	82.638	1.00	24.66
7808	CB	SER	B	216	-47.407	-16.327	83.648	1.00	24.13
7809	OG	SER	B	216	-46.548	-17.388	83.310	1.00	24.18
7810	C	SER	B	216	-47.771	-15.690	81.308	1.00	25.46
7811	O	SER	B	216	-48.546	-15.001	80.639	1.00	25.75
7812	N	ASP	B	217	-47.370	-16.903	80.936	1.00	25.82
7813	CA	ASP	B	217	-47.908	-17.500	79.722	1.00	27.15
7814	CB	ASP	B	217	-47.469	-18.956	79.581	1.00	28.06
7815	CG	ASP	B	217	-47.928	-19.551	78.282	1.00	31.35
7816	OD1	ASP	B	217	-47.258	-19.269	77.274	1.00	37.45
7817	OD2	ASP	B	217	-48.963	-20.255	78.141	1.00	34.61
7818	C	ASP	B	217	-49.427	-17.452	79.757	1.00	26.37
7819	O	ASP	B	217	-50.027	-17.399	80.827	1.00	26.98
7820	N	GLU	B	218	-50.055	-17.480	78.595	1.00	26.26
7821	CA	GLU	B	218	-51.499	-17.396	78.528	1.00	25.79
7822	CB	GLU	B	218	-51.982	-17.109	77.093	1.00	26.24
7823	CG	GLU	B	218	-52.256	-18.313	76.218	1.00	27.13
7824	CD	GLU	B	218	-53.029	-17.960	74.947	1.00	28.56
7825	OE1	GLU	B	218	-54.252	-18.243	74.880	1.00	27.55
7826	OE2	GLU	B	218	-52.403	-17.432	74.001	1.00	27.21
7827	C	GLU	B	218	-52.169	-18.614	79.157	1.00	25.85
7828	O	GLU	B	218	-53.349	-18.577	79.480	1.00	25.38
7829	N	SER	B	219	-51.386	-19.677	79.345	1.00	26.17
7830	CA	SER	B	219	-51.771	-20.896	80.078	1.00	25.81
7831	CB	SER	B	219	-50.551	-21.825	80.157	1.00	25.94
7832	OG	SER	B	219	-50.585	-22.694	79.064	1.00	29.48
7833	C	SER	B	219	-52.174	-20.654	81.531	1.00	24.81
7834	O	SER	B	219	-53.011	-21.363	82.081	1.00	24.67
7835	N	LEU	B	220	-51.501	-19.724	82.188	1.00	23.40
7836	CA	LEU	B	220	-51.823	-19.460	83.584	1.00	22.91
7837	CB	LEU	B	220	-50.858	-18.421	84.132	1.00	21.98
7838	CG	LEU	B	220	-50.721	-18.394	85.640	1.00	23.38
7839	CD1	LEU	B	220	-49.896	-17.196	86.064	1.00	22.99
7840	CD2	LEU	B	220	-50.102	-19.713	86.163	1.00	21.57
7841	C	LEU	B	220	-53.263	-18.942	83.686	1.00	22.46
7842	O	LEU	B	220	-53.576	-17.906	83.139	1.00	22.55
7843	N	GLN	B	221	-54.128	-19.674	84.370	1.00	21.97
7844	CA	GLN	B	221	-55.515	-19.276	84.522	1.00	21.93

FIGURE 3 EX

A	B	C	D	E	F	G	H	I	J
7845	CB	GLN	B	221	-56.357	-20.463	85.014	1.00	21.65
7846	CG	GLN	B	221	-57.856	-20.174	85.026	1.00	21.33
7847	CD	GLN	B	221	-58.676	-21.412	85.310	1.00	21.73
7848	OE1	GLN	B	221	-58.259	-22.270	86.111	1.00	25.67
7849	NE2	GLN	B	221	-59.807	-21.545	84.631	1.00	17.84
7850	C	GLN	B	221	-55.714	-18.070	85.454	1.00	22.01
7851	O	GLN	B	221	-56.508	-17.186	85.164	1.00	21.81
7852	N	TYR	B	222	-54.978	-18.055	86.565	1.00	21.99
7853	CA	TYR	B	222	-55.059	-16.993	87.563	1.00	21.65
7854	CB	TYR	B	222	-55.367	-17.582	88.938	1.00	21.50
7855	CG	TYR	B	222	-56.785	-18.003	89.152	1.00	20.25
7856	CD1	TYR	B	222	-57.710	-17.138	89.750	1.00	19.35
7857	CE1	TYR	B	222	-59.009	-17.526	89.972	1.00	16.76
7858	CZ	TYR	B	222	-59.399	-18.801	89.597	1.00	20.61
7859	OH	TYR	B	222	-60.700	-19.224	89.798	1.00	20.99
7860	CE2	TYR	B	222	-58.504	-19.667	89.004	1.00	20.11
7861	CD2	TYR	B	222	-57.201	-19.269	88.800	1.00	19.61
7862	C	TYR	B	222	-53.702	-16.343	87.673	1.00	21.62
7863	O	TYR	B	222	-52.711	-17.013	87.929	1.00	21.72
7864	N	PRO	B	223	-53.654	-15.037	87.512	1.00	22.12
7865	CA	PRO	B	223	-52.388	-14.320	87.587	1.00	22.77
7866	CB	PRO	B	223	-52.808	-12.855	87.468	1.00	22.52
7867	CG	PRO	B	223	-54.135	-12.919	86.728	1.00	23.29
7868	CD	PRO	B	223	-54.801	-14.151	87.238	1.00	21.98
7869	C	PRO	B	223	-51.684	-14.572	88.914	1.00	23.77
7870	O	PRO	B	223	-52.296	-14.940	89.935	1.00	23.36
7871	N	LYS	B	224	-50.375	-14.380	88.887	1.00	24.79
7872	CA	LYS	B	224	-49.558	-14.565	90.075	1.00	25.75
7873	CB	LYS	B	224	-48.195	-15.138	89.674	1.00	25.86
7874	CG	LYS	B	224	-47.213	-15.395	90.824	1.00	29.92
7875	CD	LYS	B	224	-45.906	-16.022	90.293	1.00	35.92
7876	CE	LYS	B	224	-44.974	-16.533	91.400	1.00	40.36
7877	NZ	LYS	B	224	-44.164	-17.744	90.943	1.00	42.83
7878	C	LYS	B	224	-49.365	-13.201	90.702	1.00	25.10
7879	O	LYS	B	224	-49.345	-12.184	90.006	1.00	25.60
7880	N	THR	B	225	-49.256	-13.162	92.017	1.00	25.06
7881	CA	THR	B	225	-48.895	-11.923	92.657	1.00	24.78
7882	CB	THR	B	225	-49.696	-11.694	93.905	1.00	24.99
7883	OG1	THR	B	225	-51.081	-11.616	93.574	1.00	22.31
7884	CG2	THR	B	225	-49.345	-10.303	94.475	1.00	23.65
7885	C	THR	B	225	-47.456	-12.046	93.069	1.00	25.30
7886	O	THR	B	225	-47.127	-12.865	93.904	1.00	25.31
7887	N	VAL	B	226	-46.589	-11.239	92.487	1.00	25.52
7888	CA	VAL	B	226	-45.208	-11.289	92.889	1.00	25.68
7889	CB	VAL	B	226	-44.273	-10.831	91.730	1.00	26.20
7890	CG1	VAL	B	226	-42.817	-10.607	92.220	1.00	24.52
7891	CG2	VAL	B	226	-44.317	-11.863	90.607	1.00	23.77
7892	C	VAL	B	226	-45.075	-10.421	94.150	1.00	26.34
7893	O	VAL	B	226	-45.729	-9.390	94.272	1.00	25.24
7894	N	ARG	B	227	-44.277	-10.868	95.111	1.00	26.87
7895	CA	ARG	B	227	-44.108	-10.087	96.335	1.00	28.00

FIGURE 3 EY

A	B	C	D	E	F	G	H	I	J
7896	CB	ARG	B	227	-44.894	-10.714	97.490	1.00	28.35
7897	CG	ARG	B	227	-46.428	-10.718	97.266	1.00	29.92
7898	CD	ARG	B	227	-47.187	-11.624	98.240	1.00	33.73
7899	NE	ARG	B	227	-48.636	-11.569	98.062	1.00	37.78
7900	CZ	ARG	B	227	-49.380	-12.556	97.553	1.00	39.98
7901	NH1	ARG	B	227	-48.828	-13.696	97.132	1.00	41.04
7902	NH2	ARG	B	227	-50.687	-12.397	97.457	1.00	41.02
7903	C	ARG	B	227	-42.637	-10.001	96.664	1.00	27.69
7904	O	ARG	B	227	-41.974	-11.022	96.801	1.00	28.57
7905	N	VAL	B	228	-42.109	-8.790	96.738	1.00	27.18
7906	CA	VAL	B	228	-40.707	-8.634	97.055	1.00	26.68
7907	CB	VAL	B	228	-39.812	-8.503	95.778	1.00	27.22
7908	CG1	VAL	B	228	-38.526	-7.778	96.074	1.00	25.99
7909	CG2	VAL	B	228	-40.560	-7.873	94.618	1.00	27.19
7910	C	VAL	B	228	-40.431	-7.560	98.110	1.00	26.47
7911	O	VAL	B	228	-40.971	-6.448	98.054	1.00	26.20
7912	N	PRO	B	229	-39.645	-7.937	99.118	1.00	25.68
7913	CA	PRO	B	229	-39.241	-6.997	100.165	1.00	25.11
7914	CB	PRO	B	229	-38.229	-7.803	100.985	1.00	25.52
7915	CG	PRO	B	229	-38.704	-9.213	100.850	1.00	24.51
7916	CD	PRO	B	229	-39.129	-9.300	99.361	1.00	25.37
7917	C	PRO	B	229	-38.617	-5.823	99.474	1.00	25.27
7918	O	PRO	B	229	-37.656	-5.953	98.720	1.00	25.93
7919	N	TYR	B	230	-39.200	-4.656	99.673	1.00	25.44
7920	CA	TYR	B	230	-38.730	-3.508	98.954	1.00	25.45
7921	CB	TYR	B	230	-39.409	-3.470	97.584	1.00	25.29
7922	CG	TYR	B	230	-39.032	-2.314	96.666	1.00	23.61
7923	CD1	TYR	B	230	-38.480	-2.546	95.421	1.00	22.82
7924	CE1	TYR	B	230	-38.158	-1.498	94.557	1.00	21.11
7925	CZ	TYR	B	230	-38.413	-0.211	94.939	1.00	22.06
7926	OH	TYR	B	230	-38.103	0.850	94.111	1.00	20.01
7927	CE2	TYR	B	230	-38.974	0.044	96.172	1.00	23.04
7928	CD2	TYR	B	230	-39.283	-1.009	97.026	1.00	24.33
7929	C	TYR	B	230	-39.091	-2.303	99.764	1.00	26.35
7930	O	TYR	B	230	-40.270	-2.016	99.975	1.00	26.45
7931	N	PRO	B	231	-38.079	-1.565	100.197	1.00	26.82
7932	CA	PRO	B	231	-38.331	-0.411	101.041	1.00	26.63
7933	CB	PRO	B	231	-37.055	-0.307	101.880	1.00	26.96
7934	CG	PRO	B	231	-35.973	-1.138	101.101	1.00	27.14
7935	CD	PRO	B	231	-36.651	-1.697	99.853	1.00	26.65
7936	C	PRO	B	231	-38.467	0.834	100.175	1.00	26.53
7937	O	PRO	B	231	-37.522	1.214	99.502	1.00	25.81
7938	N	LYS	B	232	-39.636	1.459	100.198	1.00	26.67
7939	CA	LYS	B	232	-39.768	2.742	99.550	1.00	27.57
7940	CB	LYS	B	232	-41.228	2.982	99.120	1.00	27.68
7941	CG	LYS	B	232	-41.742	1.919	98.113	1.00	27.32
7942	CD	LYS	B	232	-43.216	2.092	97.786	1.00	27.71
7943	CE	LYS	B	232	-43.735	1.092	96.706	1.00	25.66
7944	NZ	LYS	B	232	-43.437	1.574	95.333	1.00	22.44
7945	C	LYS	B	232	-39.235	3.799	100.541	1.00	28.03
7946	O	LYS	B	232	-38.992	3.495	101.720	1.00	28.59



FIGURE 3 EZ

A	B	C	D	E	F	G	H	I	J
7947	N	ALA	B	233	-38.994	5.008	100.064	1.00	28.09
7948	CA	ALA	B	233	-38.473	6.064	100.926	1.00	29.37
7949	CB	ALA	B	233	-38.667	7.408	100.269	1.00	28.92
7950	C	ALA	B	233	-39.062	6.094	102.342	1.00	29.71
7951	O	ALA	B	233	-40.270	6.032	102.518	1.00	30.57
7952	N	GLY	B	234	-38.199	6.187	103.346	1.00	30.05
7953	CA	GLY	B	234	-38.634	6.344	104.720	1.00	30.42
7954	C	GLY	B	234	-39.279	5.141	105.356	1.00	31.45
7955	O	GLY	B	234	-39.805	5.237	106.475	1.00	31.70
7956	N	ALA	B	235	-39.245	4.007	104.654	1.00	31.70
7957	CA	ALA	B	235	-39.823	2.762	105.149	1.00	31.68
7958	CB	ALA	B	235	-40.331	1.930	103.975	1.00	31.98
7959	C	ALA	B	235	-38.750	2.012	105.898	1.00	31.77
7960	O	ALA	B	235	-37.587	2.375	105.804	1.00	31.93
7961	N	VAL	B	236	-39.095	0.962	106.635	1.00	32.57
7962	CA	VAL	B	236	-38.016	0.255	107.316	1.00	33.10
7963	CB	VAL	B	236	-38.446	-0.593	108.537	1.00	33.83
7964	CG1	VAL	B	236	-38.187	-2.087	108.332	1.00	34.90
7965	CG2	VAL	B	236	-39.847	-0.232	109.020	1.00	32.94
7966	C	VAL	B	236	-37.147	-0.525	106.338	1.00	32.85
7967	O	VAL	B	236	-37.652	-1.296	105.497	1.00	32.95
7968	N	ASN	B	237	-35.842	-0.265	106.442	1.00	32.00
7969	CA	ASN	B	237	-34.813	-0.837	105.588	1.00	31.06
7970	CB	ASN	B	237	-33.595	0.081	105.559	1.00	30.94
7971	CG	ASN	B	237	-33.662	1.080	104.448	1.00	29.99
7972	OD1	ASN	B	237	-34.492	0.950	103.567	1.00	30.71
7973	ND2	ASN	B	237	-32.790	2.079	104.470	1.00	28.91
7974	C	ASN	B	237	-34.392	-2.167	106.112	1.00	30.86
7975	O	ASN	B	237	-34.726	-2.508	107.224	1.00	31.35
7976	N	PRO	B	238	-33.736	-2.979	105.295	1.00	31.04
7977	CA	PRO	B	238	-33.165	-4.233	105.797	1.00	31.08
7978	CB	PRO	B	238	-32.615	-4.886	104.519	1.00	30.68
7979	CG	PRO	B	238	-32.384	-3.719	103.608	1.00	30.58
7980	CD	PRO	B	238	-33.575	-2.847	103.837	1.00	30.47
7981	C	PRO	B	238	-32.007	-3.944	106.781	1.00	31.59
7982	O	PRO	B	238	-31.406	-2.867	106.751	1.00	30.75
7983	N	THR	B	239	-31.707	-4.893	107.657	1.00	32.48
7984	CA	THR	B	239	-30.552	-4.737	108.524	1.00	33.35
7985	CB	THR	B	239	-30.894	-4.975	110.012	1.00	33.48
7986	OG1	THR	B	239	-31.549	-6.238	110.171	1.00	33.78
7987	CG2	THR	B	239	-31.926	-3.946	110.511	1.00	32.20
7988	C	THR	B	239	-29.482	-5.697	108.024	1.00	34.05
7989	O	THR	B	239	-29.779	-6.677	107.339	1.00	34.27
7990	N	VAL	B	240	-28.235	-5.402	108.349	1.00	34.30
7991	CA	VAL	B	240	-27.128	-6.198	107.853	1.00	34.60
7992	CB	VAL	B	240	-26.404	-5.449	106.730	1.00	34.08
7993	CG1	VAL	B	240	-25.321	-6.329	106.094	1.00	33.81
7994	CG2	VAL	B	240	-25.830	-4.149	107.263	1.00	33.77
7995	C	VAL	B	240	-26.125	-6.568	108.947	1.00	35.20
7996	O	VAL	B	240	-25.862	-5.793	109.872	1.00	34.33
7997	N	LYS	B	241	-25.611	-7.789	108.849	1.00	36.27

FIGURE 3 FA

A	B	C	D	E	F	G	H	I	J
7998	CA	LYS	B	241	-24.549	-8.253	109.727	1.00	37.18
7999	CB	LYS	B	241	-25.018	-9.402	110.599	1.00	36.94
8000	CG	LYS	B	241	-25.460	-8.988	112.005	1.00	37.33
8001	CD	LYS	B	241	-26.948	-9.027	112.191	1.00	37.13
8002	CE	LYS	B	241	-27.329	-9.127	113.668	1.00	37.02
8003	NZ	LYS	B	241	-27.599	-10.541	114.125	1.00	37.48
8004	C	LYS	B	241	-23.419	-8.704	108.830	1.00	38.02
8005	O	LYS	B	241	-23.654	-9.049	107.666	1.00	38.17
8006	N	PHE	B	242	-22.191	-8.695	109.345	1.00	38.53
8007	CA	PHE	B	242	-21.060	-9.112	108.538	1.00	38.67
8008	CB	PHE	B	242	-20.150	-7.919	108.261	1.00	38.63
8009	CG	PHE	B	242	-19.066	-8.205	107.257	1.00	39.51
8010	CD1	PHE	B	242	-19.311	-8.073	105.900	1.00	38.66
8011	CE1	PHE	B	242	-18.322	-8.335	104.974	1.00	40.21
8012	CZ	PHE	B	242	-17.063	-8.743	105.401	1.00	40.58
8013	CE2	PHE	B	242	-16.807	-8.877	106.753	1.00	39.64
8014	CD2	PHE	B	242	-17.799	-8.612	107.674	1.00	39.14
8015	C	PHE	B	242	-20.307	-10.232	109.243	1.00	39.45
8016	O	PHE	B	242	-20.087	-10.170	110.460	1.00	39.74
8017	N	PHE	B	243	-19.929	-11.264	108.494	1.00	39.56
8018	CA	PHE	B	243	-19.220	-12.394	109.075	1.00	40.01
8019	CB	PHE	B	243	-20.144	-13.583	109.252	1.00	40.24
8020	CG	PHE	B	243	-21.400	-13.294	110.005	1.00	39.63
8021	CD1	PHE	B	243	-22.480	-12.702	109.375	1.00	38.78
8022	CE1	PHE	B	243	-23.652	-12.455	110.063	1.00	38.28
8023	CZ	PHE	B	243	-23.766	-12.811	111.393	1.00	38.50
8024	CE2	PHE	B	243	-22.702	-13.418	112.035	1.00	39.56
8025	CD2	PHE	B	243	-21.520	-13.661	111.333	1.00	39.40
8026	C	PHE	B	243	-18.059	-12.891	108.222	1.00	40.72
8027	O	PHE	B	243	-18.065	-12.752	106.996	1.00	40.63
8028	N	VAL	B	244	-17.060	-13.474	108.879	1.00	41.01
8029	CA	VAL	B	244	-15.986	-14.142	108.164	1.00	41.48
8030	CB	VAL	B	244	-14.733	-13.267	107.963	1.00	41.57
8031	CG1	VAL	B	244	-14.658	-12.196	108.984	1.00	42.82
8032	CG2	VAL	B	244	-13.483	-14.109	107.935	1.00	41.56
8033	C	VAL	B	244	-15.671	-15.495	108.777	1.00	41.65
8034	O	VAL	B	244	-15.418	-15.620	109.978	1.00	42.00
8035	N	VAL	B	245	-15.737	-16.512	107.932	1.00	41.78
8036	CA	VAL	B	245	-15.485	-17.877	108.322	1.00	42.04
8037	CB	VAL	B	245	-16.609	-18.792	107.827	1.00	42.21
8038	CG1	VAL	B	245	-16.801	-18.624	106.312	1.00	41.86
8039	CG2	VAL	B	245	-16.311	-20.244	108.180	1.00	42.17
8040	C	VAL	B	245	-14.175	-18.351	107.702	1.00	42.59
8041	O	VAL	B	245	-13.849	-18.011	106.564	1.00	42.17
8042	N	ASN	B	246	-13.408	-19.115	108.470	1.00	43.43
8043	CA	ASN	B	246	-12.168	-19.689	107.967	1.00	44.19
8044	CB	ASN	B	246	-11.195	-19.985	109.115	1.00	44.00
8045	CG	ASN	B	246	-9.854	-20.526	108.628	1.00	43.62
8046	OD1	ASN	B	246	-9.806	-21.419	107.792	1.00	43.78
8047	ND2	ASN	B	246	-8.767	-19.998	109.168	1.00	40.49
8048	C	ASN	B	246	-12.558	-20.965	107.269	1.00	44.86

FIGURE 3 FB

A	B	C	D	E	F	G	H	I	J
8049	O	ASN	B	246	-13.136	-21.856	107.887	1.00	44.93
8050	N	THR	B	247	-12.275	-21.059	105.975	1.00	46.04
8051	CA	THR	B	247	-12.670	-22.261	105.260	1.00	46.94
8052	CB	THR	B	247	-12.940	-21.969	103.771	1.00	46.97
8053	OG1	THR	B	247	-11.731	-21.577	103.112	1.00	46.64
8054	CG2	THR	B	247	-13.835	-20.749	103.648	1.00	46.00
8055	C	THR	B	247	-11.671	-23.389	105.470	1.00	47.81
8056	O	THR	B	247	-12.043	-24.562	105.448	1.00	48.21
8057	N	ASP	B	248	-10.412	-23.037	105.718	1.00	48.70
8058	CA	ASP	B	248	-9.395	-24.055	105.986	1.00	49.91
8059	CB	ASP	B	248	-7.994	-23.433	106.092	1.00	49.97
8060	CG	ASP	B	248	-7.490	-22.889	104.767	1.00	50.78
8061	OD1	ASP	B	248	-7.971	-23.358	103.712	1.00	50.27
8062	OD2	ASP	B	248	-6.610	-21.995	104.683	1.00	52.28
8063	C	ASP	B	248	-9.711	-24.840	107.264	1.00	50.47
8064	O	ASP	B	248	-9.239	-25.958	107.441	1.00	50.52
8065	N	SER	B	249	-10.519	-24.270	108.154	1.00	51.46
8066	CA	SER	B	249	-10.812	-24.958	109.416	1.00	52.21
8067	CB	SER	B	249	-10.593	-24.021	110.612	1.00	52.18
8068	OG	SER	B	249	-11.825	-23.586	111.162	1.00	53.07
8069	C	SER	B	249	-12.206	-25.600	109.457	1.00	52.53
8070	O	SER	B	249	-12.761	-25.857	110.533	1.00	52.48
8071	N	LEU	B	250	-12.761	-25.854	108.277	1.00	52.90
8072	CA	LEU	B	250	-14.057	-26.504	108.156	1.00	53.25
8073	CB	LEU	B	250	-14.514	-26.511	106.695	1.00	52.98
8074	CG	LEU	B	250	-15.635	-25.572	106.239	1.00	52.88
8075	CD1	LEU	B	250	-15.304	-24.970	104.871	1.00	52.20
8076	CD2	LEU	B	250	-15.905	-24.471	107.244	1.00	51.68
8077	C	LEU	B	250	-13.949	-27.932	108.660	1.00	53.88
8078	O	LEU	B	250	-12.888	-28.552	108.555	1.00	53.74
8079	N	SER	B	251	-15.046	-28.447	109.211	1.00	54.40
8080	CA	SER	B	251	-15.089	-29.821	109.696	1.00	55.11
8081	CB	SER	B	251	-14.851	-29.891	111.198	1.00	55.26
8082	OG	SER	B	251	-15.069	-31.214	111.648	1.00	55.97
8083	C	SER	B	251	-16.425	-30.464	109.373	1.00	55.39
8084	O	SER	B	251	-17.419	-29.778	109.194	1.00	55.53
8085	N	SER	B	252	-16.455	-31.787	109.329	1.00	55.57
8086	CA	SER	B	252	-17.669	-32.477	108.931	1.00	55.82
8087	CB	SER	B	252	-17.300	-33.627	107.996	1.00	55.97
8088	OG	SER	B	252	-16.172	-33.253	107.217	1.00	56.43
8089	C	SER	B	252	-18.469	-32.977	110.128	1.00	55.76
8090	O	SER	B	252	-19.536	-33.572	109.982	1.00	55.88
8091	N	VAL	B	253	-17.954	-32.717	111.318	1.00	55.78
8092	CA	VAL	B	253	-18.588	-33.189	112.537	1.00	55.76
8093	CB	VAL	B	253	-17.629	-34.115	113.328	1.00	55.84
8094	CG1	VAL	B	253	-18.059	-34.238	114.784	1.00	56.15
8095	CG2	VAL	B	253	-17.551	-35.488	112.666	1.00	55.52
8096	C	VAL	B	253	-18.999	-32.004	113.388	1.00	55.72
8097	O	VAL	B	253	-19.652	-32.151	114.424	1.00	55.94
8098	N	THR	B	254	-18.613	-30.819	112.938	1.00	55.49
8099	CA	THR	B	254	-18.944	-29.606	113.658	1.00	55.35

FIGURE 3 FC

A	B	C	D	E	F	G	H	I	J
8100	CB	THR	B	254	-17.771	-29.199	114.577	1.00	55.43
8101	OG1	THR	B	254	-17.432	-27.824	114.355	1.00	55.88
8102	CG2	THR	B	254	-16.519	-29.920	114.165	1.00	56.14
8103	C	THR	B	254	-19.358	-28.463	112.731	1.00	54.81
8104	O	THR	B	254	-18.762	-28.239	111.674	1.00	54.88
8105	N	ASN	B	255	-20.401	-27.748	113.132	1.00	54.08
8106	CA	ASN	B	255	-20.859	-26.609	112.359	1.00	52.98
8107	CB	ASN	B	255	-22.150	-26.032	112.940	1.00	53.13
8108	CG	ASN	B	255	-23.366	-26.816	112.512	1.00	54.12
8109	OD1	ASN	B	255	-23.356	-27.440	111.450	1.00	54.93
8110	ND2	ASN	B	255	-24.418	-26.803	113.327	1.00	58.09
8111	C	ASN	B	255	-19.747	-25.592	112.339	1.00	52.05
8112	O	ASN	B	255	-18.915	-25.562	113.245	1.00	52.18
8113	N	ALA	B	256	-19.704	-24.791	111.284	1.00	50.74
8114	CA	ALA	B	256	-18.674	-23.787	111.133	1.00	49.28
8115	CB	ALA	B	256	-18.558	-23.386	109.680	1.00	49.39
8116	C	ALA	B	256	-19.018	-22.584	111.984	1.00	48.62
8117	O	ALA	B	256	-20.192	-22.248	112.153	1.00	48.43
8118	N	THR	B	257	-18.005	-21.940	112.542	1.00	47.61
8119	CA	THR	B	257	-18.259	-20.730	113.298	1.00	47.02
8120	CB	THR	B	257	-17.503	-20.703	114.659	1.00	47.32
8121	OG1	THR	B	257	-16.787	-19.463	114.797	1.00	46.70
8122	CG2	THR	B	257	-16.407	-21.743	114.681	1.00	47.86
8123	C	THR	B	257	-17.935	-19.518	112.444	1.00	46.26
8124	O	THR	B	257	-16.844	-19.385	111.888	1.00	46.32
8125	N	SER	B	258	-18.912	-18.643	112.320	1.00	45.20
8126	CA	SER	B	258	-18.714	-17.441	111.558	1.00	44.45
8127	CB	SER	B	258	-20.003	-17.070	110.816	1.00	44.73
8128	OG	SER	B	258	-20.632	-18.236	110.294	1.00	44.99
8129	C	SER	B	258	-18.330	-16.382	112.571	1.00	43.81
8130	O	SER	B	258	-18.960	-16.247	113.624	1.00	43.27
8131	N	ILE	B	259	-17.262	-15.661	112.281	1.00	42.93
8132	CA	ILE	B	259	-16.837	-14.633	113.191	1.00	42.31
8133	CB	ILE	B	259	-15.313	-14.454	113.162	1.00	42.54
8134	CG1	ILE	B	259	-14.643	-15.714	113.695	1.00	42.45
8135	CD1	ILE	B	259	-15.288	-16.235	114.960	1.00	42.58
8136	CG2	ILE	B	259	-14.914	-13.273	114.016	1.00	42.31
8137	C	ILE	B	259	-17.506	-13.384	112.721	1.00	41.66
8138	O	ILE	B	259	-17.317	-12.970	111.590	1.00	41.40
8139	N	GLN	B	260	-18.312	-12.794	113.585	1.00	41.02
8140	CA	GLN	B	260	-18.988	-11.570	113.229	1.00	40.51
8141	CB	GLN	B	260	-20.274	-11.409	114.032	1.00	40.31
8142	CG	GLN	B	260	-20.880	-10.028	113.875	1.00	40.06
8143	CD	GLN	B	260	-22.307	-9.943	114.377	1.00	40.09
8144	OE1	GLN	B	260	-22.759	-10.796	115.152	1.00	39.59
8145	NE2	GLN	B	260	-23.020	-8.910	113.941	1.00	37.16
8146	C	GLN	B	260	-18.096	-10.372	113.465	1.00	40.37
8147	O	GLN	B	260	-17.384	-10.296	114.466	1.00	40.89
8148	N	ILE	B	261	-18.122	-9.452	112.512	1.00	40.18
8149	CA	ILE	B	261	-17.454	-8.168	112.618	1.00	39.30
8150	CB	ILE	B	261	-16.673	-7.873	111.353	1.00	39.07

FIGURE 3 FD

A	B	C	D	E	F	G	H	I	J
8151	CG1	ILE	B	261	-15.581	-8.928	111.126	1.00	39.08
8152	CD1	ILE	B	261	-14.550	-8.496	110.109	1.00	36.42
8153	CG2	ILE	B	261	-16.071	-6.482	111.413	1.00	38.83
8154	C	ILE	B	261	-18.594	-7.173	112.726	1.00	39.53
8155	O	ILE	B	261	-19.438	-7.097	111.827	1.00	39.84
8156	N	THR	B	262	-18.662	-6.431	113.825	1.00	38.85
8157	CA	THR	B	262	-19.733	-5.457	113.961	1.00	38.23
8158	CB	THR	B	262	-20.106	-5.288	115.426	1.00	38.47
8159	OG1	THR	B	262	-18.910	-5.066	116.169	1.00	37.80
8160	CG2	THR	B	262	-20.649	-6.597	115.998	1.00	38.72
8161	C	THR	B	262	-19.341	-4.109	113.372	1.00	37.66
8162	O	THR	B	262	-18.165	-3.766	113.279	1.00	37.65
8163	N	ALA	B	263	-20.344	-3.343	112.981	1.00	37.26
8164	CA	ALA	B	263	-20.136	-2.017	112.422	1.00	36.78
8165	CB	ALA	B	263	-21.413	-1.555	111.830	1.00	37.01
8166	C	ALA	B	263	-19.715	-1.046	113.517	1.00	36.64
8167	O	ALA	B	263	-19.971	-1.282	114.688	1.00	36.85
8168	N	PRO	B	264	-19.098	0.065	113.148	1.00	36.52
8169	CA	PRO	B	264	-18.688	1.050	114.147	1.00	36.33
8170	CB	PRO	B	264	-18.139	2.199	113.308	1.00	36.24
8171	CG	PRO	B	264	-17.890	1.641	111.959	1.00	35.73
8172	CD	PRO	B	264	-18.765	0.474	111.776	1.00	36.33
8173	C	PRO	B	264	-19.901	1.545	114.926	1.00	37.00
8174	O	PRO	B	264	-21.002	1.697	114.355	1.00	36.67
8175	N	ALA	B	265	-19.697	1.794	116.220	1.00	37.13
8176	CA	ALA	B	265	-20.729	2.350	117.086	1.00	37.00
8177	CB	ALA	B	265	-20.136	2.696	118.461	1.00	37.56
8178	C	ALA	B	265	-21.364	3.585	116.455	1.00	37.13
8179	O	ALA	B	265	-22.561	3.824	116.609	1.00	36.95
8180	N	SER	B	266	-20.577	4.369	115.726	1.00	37.15
8181	CA	SER	B	266	-21.138	5.551	115.097	1.00	37.43
8182	CB	SER	B	266	-20.047	6.469	114.592	1.00	37.04
8183	OG	SER	B	266	-19.411	5.880	113.484	1.00	38.44
8184	C	SER	B	266	-22.068	5.178	113.936	1.00	37.94
8185	O	SER	B	266	-22.594	6.046	113.244	1.00	37.98
8186	N	MET	B	267	-22.238	3.887	113.702	1.00	38.09
8187	CA	MET	B	267	-23.175	3.443	112.688	1.00	38.48
8188	CB	MET	B	267	-22.513	2.483	111.691	1.00	38.25
8189	CG	MET	B	267	-21.512	3.168	110.770	1.00	38.46
8190	SD	MET	B	267	-22.322	3.969	109.403	1.00	37.89
8191	CE	MET	B	267	-21.184	5.222	108.957	1.00	34.81
8192	C	MET	B	267	-24.285	2.747	113.437	1.00	38.49
8193	O	MET	B	267	-25.454	2.946	113.144	1.00	38.45
8194	N	LEU	B	268	-23.914	1.966	114.443	1.00	38.76
8195	CA	LEU	B	268	-24.910	1.222	115.198	1.00	39.23
8196	CB	LEU	B	268	-24.252	0.337	116.244	1.00	39.27
8197	CG	LEU	B	268	-23.630	-0.970	115.789	1.00	39.59
8198	CD1	LEU	B	268	-23.026	-1.638	117.009	1.00	40.45
8199	CD2	LEU	B	268	-24.656	-1.873	115.122	1.00	38.79
8200	C	LEU	B	268	-25.874	2.155	115.884	1.00	39.28
8201	O	LEU	B	268	-26.848	1.725	116.484	1.00	39.39

FIGURE 3 FE

A	B	C	D	E	F	G	H	I	J
8202	N	ILE	B	269	-25.585	3.441	115.795	1.00	39.69
8203	CA	ILE	B	269	-26.419	4.453	116.410	1.00	40.33
8204	CB	ILE	B	269	-25.674	5.825	116.370	1.00	40.48
8205	CG	ILE	B	269	-26.105	6.690	117.535	1.00	40.65
8206	CD1	ILE	B	269	-25.847	6.028	118.865	1.00	42.72
8207	CG2	ILE	B	269	-25.841	6.532	115.040	1.00	41.25
8208	C	ILE	B	269	-27.827	4.498	115.770	1.00	40.34
8209	O	ILE	B	269	-28.841	4.679	116.459	1.00	40.41
8210	N	GLY	B	270	-27.890	4.288	114.459	1.00	39.85
8211	CA	GLY	B	270	-29.164	4.285	113.751	1.00	39.12
8212	C	GLY	B	270	-29.196	3.299	112.589	1.00	38.12
8213	O	GLY	B	270	-28.502	2.277	112.616	1.00	37.74
8214	N	ASP	B	271	-30.035	3.593	111.594	1.00	36.92
8215	CA	ASP	B	271	-30.104	2.791	110.388	1.00	36.02
8216	CB	ASP	B	271	-31.312	3.179	109.547	1.00	35.99
8217	CG	ASP	B	271	-32.594	2.530	110.034	1.00	36.39
8218	OD1	ASP	B	271	-32.509	1.672	110.959	1.00	33.33
8219	OD2	ASP	B	271	-33.729	2.818	109.548	1.00	34.54
8220	C	ASP	B	271	-28.831	3.069	109.608	1.00	35.29
8221	O	ASP	B	271	-28.382	4.206	109.515	1.00	35.40
8222	N	HIS	B	272	-28.223	2.031	109.065	1.00	33.91
8223	CA	HIS	B	272	-27.004	2.248	108.305	1.00	33.12
8224	CB	HIS	B	272	-25.795	2.096	109.227	1.00	31.99
8225	CG	HIS	B	272	-25.746	0.772	109.899	1.00	30.02
8226	ND1	HIS	B	272	-26.486	0.489	111.028	1.00	30.83
8227	CE1	HIS	B	272	-26.273	-0.764	111.388	1.00	29.81
8228	NE2	HIS	B	272	-25.427	-1.303	110.530	1.00	30.16
8229	CD2	HIS	B	272	-25.097	-0.368	109.578	1.00	28.42
8230	C	HIS	B	272	-26.946	1.174	107.234	1.00	32.53
8231	O	HIS	B	272	-27.816	0.337	107.186	1.00	32.22
8232	N	TYR	B	273	-25.903	1.205	106.411	1.00	32.18
8233	CA	TYR	B	273	-25.664	0.185	105.409	1.00	32.39
8234	CB	TYR	B	273	-25.943	0.727	104.005	1.00	31.52
8235	CG	TYR	B	273	-27.277	1.379	103.776	1.00	30.43
8236	CD1	TYR	B	273	-28.438	0.637	103.736	1.00	28.06
8237	CE1	TYR	B	273	-29.655	1.241	103.480	1.00	29.01
8238	CZ	TYR	B	273	-29.708	2.587	103.242	1.00	28.63
8239	OH	TYR	B	273	-30.907	3.211	102.998	1.00	29.60
8240	CE2	TYR	B	273	-28.562	3.339	103.265	1.00	30.14
8241	CD2	TYR	B	273	-27.357	2.735	103.523	1.00	29.36
8242	C	TYR	B	273	-24.199	-0.217	105.347	1.00	33.08
8243	O	TYR	B	273	-23.299	0.567	105.694	1.00	32.62
8244	N	LEU	B	274	-23.983	-1.431	104.841	1.00	33.48
8245	CA	LEU	B	274	-22.670	-1.916	104.490	1.00	34.29
8246	CB	LEU	B	274	-22.584	-3.422	104.690	1.00	34.01
8247	CG	LEU	B	274	-21.233	-4.065	104.329	1.00	35.66
8248	CD1	LEU	B	274	-20.163	-3.758	105.396	1.00	34.34
8249	CD2	LEU	B	274	-21.383	-5.577	104.147	1.00	34.70
8250	C	LEU	B	274	-22.592	-1.570	103.022	1.00	35.14
8251	O	LEU	B	274	-23.398	-2.041	102.234	1.00	35.22
8252	N	CYS	B	275	-21.633	-0.743	102.637	1.00	36.49

FIGURE 3 FF

A	B	C	D	E	F	G	H	I	J
8253	CA	CYS	B	275	-21.598	-0.284	101.264	1.00	38.00
8254	CB	CYS	B	275	-21.766	1.233	101.203	1.00	37.89
8255	SG	CYS	B	275	-20.464	2.141	102.060	1.00	41.73
8256	C	CYS	B	275	-20.365	-0.738	100.485	1.00	38.60
8257	O	CYS	B	275	-20.330	-0.615	99.266	1.00	38.77
8258	N	ASP	B	276	-19.350	-1.246	101.175	1.00	39.13
8259	CA	ASP	B	276	-18.185	-1.764	100.469	1.00	39.49
8260	CB	ASP	B	276	-17.294	-0.654	99.942	1.00	39.64
8261	CG	ASP	B	276	-16.074	-1.199	99.235	1.00	41.05
8262	OD1	ASP	B	276	-15.992	-1.067	98.000	1.00	43.44
8263	OD2	ASP	B	276	-15.153	-1.800	99.829	1.00	42.89
8264	C	ASP	B	276	-17.360	-2.750	101.284	1.00	39.39
8265	O	ASP	B	276	-17.216	-2.592	102.493	1.00	39.54
8266	N	VAL	B	277	-16.831	-3.763	100.599	1.00	38.98
8267	CA	VAL	B	277	-16.019	-4.799	101.206	1.00	38.77
8268	CB	VAL	B	277	-16.788	-6.124	101.324	1.00	39.05
8269	CG1	VAL	B	277	-15.901	-7.199	101.921	1.00	39.22
8270	CG2	VAL	B	277	-18.049	-5.955	102.168	1.00	37.97
8271	C	VAL	B	277	-14.786	-5.042	100.355	1.00	39.05
8272	O	VAL	B	277	-14.876	-5.521	99.234	1.00	39.52
8273	N	THR	B	278	-13.615	-4.719	100.882	1.00	39.00
8274	CA	THR	B	278	-12.413	-4.928	100.116	1.00	37.98
8275	CB	THR	B	278	-11.909	-3.594	99.597	1.00	38.19
8276	OG1	THR	B	278	-12.815	-3.088	98.603	1.00	38.23
8277	CG2	THR	B	278	-10.607	-3.795	98.848	1.00	37.09
8278	C	THR	B	278	-11.326	-5.595	100.954	1.00	38.18
8279	O	THR	B	278	-10.843	-5.021	101.938	1.00	38.22
8280	N	TRP	B	279	-10.936	-6.804	100.564	1.00	37.09
8281	CA	TRP	B	279	-9.850	-7.486	101.250	1.00	36.31
8282	CB	TRP	B	279	-9.733	-8.923	100.759	1.00	35.92
8283	CG	TRP	B	279	-10.672	-9.858	101.423	1.00	34.21
8284	CD1	TRP	B	279	-11.853	-10.320	100.938	1.00	33.31
8285	NE1	TRP	B	279	-12.438	-11.178	101.841	1.00	32.80
8286	CE2	TRP	B	279	-11.618	-11.285	102.933	1.00	33.27
8287	CD2	TRP	B	279	-10.502	-10.461	102.704	1.00	33.83
8288	CE3	TRP	B	279	-9.509	-10.394	103.683	1.00	33.15
8289	CZ3	TRP	B	279	-9.663	-11.125	104.826	1.00	34.15
8290	CH2	TRP	B	279	-10.784	-11.926	105.027	1.00	34.29
8291	CZ2	TRP	B	279	-11.772	-12.021	104.092	1.00	34.17
8292	C	TRP	B	279	-8.546	-6.737	100.984	1.00	36.37
8293	O	TRP	B	279	-8.279	-6.313	99.861	1.00	35.97
8294	N	ALA	B	280	-7.728	-6.564	102.010	1.00	35.86
8295	CA	ALA	B	280	-6.475	-5.858	101.796	1.00	36.13
8296	CB	ALA	B	280	-6.240	-4.819	102.902	1.00	36.41
8297	C	ALA	B	280	-5.298	-6.821	101.703	1.00	35.57
8298	O	ALA	B	280	-4.365	-6.586	100.960	1.00	34.87
8299	N	THR	B	281	-5.363	-7.904	102.470	1.00	36.03
8300	CA	THR	B	281	-4.296	-8.899	102.519	1.00	36.43
8301	CB	THR	B	281	-3.281	-8.600	103.649	1.00	36.45
8302	OG1	THR	B	281	-3.806	-9.079	104.897	1.00	35.74
8303	CG2	THR	B	281	-3.122	-7.116	103.887	1.00	35.62

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**FIGURE 3 FG**

A	B	C	D	E	F	G	H	I	J
8304	C	THR	B	281	-4.950	-10.211	102.852	1.00	36.84
8305	O	THR	B	281	-6.161	-10.304	102.902	1.00	37.00
8306	N	GLN	B	282	-4.142	-11.223	103.115	1.00	37.40
8307	CA	GLN	B	282	-4.672	-12.520	103.486	1.00	38.02
8308	CB	GLN	B	282	-3.538	-13.545	103.564	1.00	37.95
8309	CG	GLN	B	282	-2.706	-13.655	102.289	1.00	38.65
8310	CD	GLN	B	282	-3.526	-14.069	101.062	1.00	38.38
8311	OE1	GLN	B	282	-4.628	-14.626	101.190	1.00	38.79
8312	NE2	GLN	B	282	-2.988	-13.800	99.878	1.00	35.23
8313	C	GLN	B	282	-5.338	-12.437	104.840	1.00	38.28
8314	O	GLN	B	282	-6.153	-13.287	105.194	1.00	38.52
8315	N	GLU	B	283	-4.986	-11.412	105.604	1.00	38.86
8316	CA	GLU	B	283	-5.453	-11.328	106.976	1.00	39.52
8317	CB	GLU	B	283	-4.291	-11.653	107.925	1.00	39.66
8318	CG	GLU	B	283	-3.972	-13.137	108.032	1.00	41.29
8319	CD	GLU	B	283	-2.684	-13.415	108.804	1.00	44.21
8320	OE1	GLU	B	283	-2.355	-14.604	109.007	1.00	44.57
8321	OE2	GLU	B	283	-1.994	-12.444	109.197	1.00	45.27
8322	C	GLU	B	283	-6.067	-9.987	107.354	1.00	39.44
8323	O	GLU	B	283	-6.421	-9.763	108.518	1.00	39.54
8324	N	ARG	B	284	-6.194	-9.092	106.385	1.00	39.32
8325	CA	ARG	B	284	-6.752	-7.782	106.672	1.00	39.16
8326	CB	ARG	B	284	-5.641	-6.750	106.734	1.00	39.23
8327	CG	ARG	B	284	-6.114	-5.329	106.614	1.00	39.03
8328	CD	ARG	B	284	-4.983	-4.351	106.729	1.00	39.98
8329	NE	ARG	B	284	-4.252	-4.593	107.974	1.00	41.16
8330	CZ	ARG	B	284	-2.970	-4.328	108.146	1.00	41.27
8331	NH1	ARG	B	284	-2.397	-4.579	109.316	1.00	42.14
8332	NH2	ARG	B	284	-2.263	-3.803	107.157	1.00	39.73
8333	C	ARG	B	284	-7.820	-7.344	105.673	1.00	39.07
8334	O	ARG	B	284	-7.554	-7.152	104.484	1.00	39.65
8335	N	ILE	B	285	-9.031	-7.158	106.173	1.00	38.68
8336	CA	ILE	B	285	-10.131	-6.749	105.327	1.00	37.92
8337	CB	ILE	B	285	-11.241	-7.792	105.399	1.00	37.87
8338	CG1	ILE	B	285	-12.387	-7.434	104.437	1.00	38.16
8339	CD1	ILE	B	285	-13.473	-8.491	104.376	1.00	36.63
8340	CG2	ILE	B	285	-11.727	-7.933	106.825	1.00	37.11
8341	C	ILE	B	285	-10.671	-5.393	105.731	1.00	37.86
8342	O	ILE	B	285	-10.762	-5.074	106.926	1.00	37.77
8343	N	SER	B	286	-11.016	-4.587	104.731	1.00	37.21
8344	CA	SER	B	286	-11.661	-3.313	104.994	1.00	37.35
8345	CB	SER	B	286	-11.010	-2.176	104.197	1.00	37.02
8346	OG	SER	B	286	-11.201	-2.342	102.812	1.00	37.16
8347	C	SER	B	286	-13.167	-3.376	104.709	1.00	37.41
8348	O	SER	B	286	-13.595	-3.962	103.703	1.00	37.72
8349	N	LEU	B	287	-13.956	-2.801	105.619	1.00	37.62
8350	CA	LEU	B	287	-15.399	-2.633	105.441	1.00	37.40
8351	CB	LEU	B	287	-16.196	-3.198	106.604	1.00	37.50
8352	CG	LEU	B	287	-16.435	-4.694	106.778	1.00	37.77
8353	CD1	LEU	B	287	-15.702	-5.185	108.004	1.00	38.51
8354	CD2	LEU	B	287	-16.094	-5.500	105.510	1.00	35.92



FIGURE 3 FH

A	B	C	D	E	F	G	H	I	J
8355	C	LEU	B	287	-15.675	-1.151	105.421	1.00	37.77
8356	O	LEU	B	287	-15.028	-0.384	106.145	1.00	37.69
8357	N	GLN	B	288	-16.617	-0.735	104.582	1.00	37.44
8358	CA	GLN	B	288	-17.032	0.655	104.565	1.00	37.10
8359	CB	GLN	B	288	-16.744	1.327	103.232	1.00	37.38
8360	CG	GLN	B	288	-15.392	1.975	103.182	1.00	38.66
8361	CD	GLN	B	288	-15.117	2.632	101.861	1.00	40.12
8362	OE1	GLN	B	288	-15.178	3.849	101.744	1.00	42.07
8363	NE2	GLN	B	288	-14.819	1.826	100.850	1.00	42.14
8364	C	GLN	B	288	-18.507	0.684	104.889	1.00	36.53
8365	O	GLN	B	288	-19.287	-0.051	104.299	1.00	36.84
8366	N	TRP	B	289	-18.878	1.520	105.851	1.00	35.59
8367	CA	TRP	B	289	-20.241	1.586	106.310	1.00	34.92
8368	CB	TRP	B	289	-20.327	1.326	107.815	1.00	34.68
8369	CG	TRP	B	289	-19.831	-0.019	108.238	1.00	33.12
8370	CD1	TRP	B	289	-18.556	-0.359	108.516	1.00	31.84
8371	NE1	TRP	B	289	-18.483	-1.685	108.873	1.00	31.97
8372	CE2	TRP	B	289	-19.738	-2.223	108.837	1.00	31.75
8373	CD2	TRP	B	289	-20.615	-1.201	108.444	1.00	32.72
8374	CE3	TRP	B	289	-21.974	-1.501	108.326	1.00	32.48
8375	CZ3	TRP	B	289	-22.399	-2.782	108.607	1.00	32.80
8376	CH2	TRP	B	289	-21.502	-3.768	109.003	1.00	32.08
8377	CZ2	TRP	B	289	-20.169	-3.507	109.131	1.00	31.47
8378	C	TRP	B	289	-20.797	2.943	105.993	1.00	35.14
8379	O	TRP	B	289	-20.059	3.909	105.856	1.00	35.72
8380	N	LEU	B	290	-22.112	3.014	105.903	1.00	35.19
8381	CA	LEU	B	290	-22.780	4.237	105.509	1.00	35.28
8382	CB	LEU	B	290	-23.074	4.178	104.014	1.00	35.14
8383	CG	LEU	B	290	-23.255	5.463	103.218	1.00	36.86
8384	CD1	LEU	B	290	-24.047	5.191	101.918	1.00	34.86
8385	CD2	LEU	B	290	-23.933	6.510	104.064	1.00	38.04
8386	C	LEU	B	290	-24.086	4.385	106.277	1.00	34.83
8387	O	LEU	B	290	-24.895	3.459	106.353	1.00	33.83
8388	N	ARG	B	291	-24.276	5.562	106.854	1.00	35.32
8389	CA	ARG	B	291	-25.508	5.874	107.578	1.00	35.73
8390	CB	ARG	B	291	-25.315	7.156	108.375	1.00	36.02
8391	CG	ARG	B	291	-24.458	7.008	109.591	1.00	37.90
8392	CD	ARG	B	291	-24.452	8.252	110.451	1.00	39.63
8393	NE	ARG	B	291	-23.770	8.015	111.708	1.00	38.90
8394	CZ	ARG	B	291	-23.265	8.973	112.459	1.00	40.15
8395	NH1	ARG	B	291	-22.643	8.666	113.592	1.00	38.43
8396	NH2	ARG	B	291	-23.374	10.236	112.071	1.00	38.95
8397	C	ARG	B	291	-26.677	6.090	106.617	1.00	35.27
8398	O	ARG	B	291	-26.501	6.598	105.513	1.00	34.88
8399	N	ARG	B	292	-27.880	5.741	107.058	1.00	35.74
8400	CA	ARG	B	292	-29.075	5.944	106.239	1.00	35.22
8401	CB	ARG	B	292	-30.348	5.581	107.007	1.00	35.20
8402	CG	ARG	B	292	-31.498	5.216	106.064	1.00	34.72
8403	CD	ARG	B	292	-32.801	4.879	106.741	1.00	33.40
8404	NE	ARG	B	292	-33.919	4.915	105.804	1.00	34.54
8405	CZ	ARG	B	292	-34.938	4.070	105.848	1.00	35.08

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**FIGURE 3 FI**

A	B	C	D	E	F	G	H	I	J
8406	NH1	ARG	B	292	-35.929	4.151	104.958	1.00	35.28
8407	NH2	ARG	B	292	-34.961	3.126	106.779	1.00	34.28
8408	C	ARG	B	292	-29.134	7.361	105.660	1.00	35.33
8409	O	ARG	B	292	-29.630	7.568	104.557	1.00	35.36
8410	N	ILE	B	293	-28.651	8.347	106.403	1.00	35.34
8411	CA	ILE	B	293	-28.485	9.662	105.816	1.00	35.81
8412	CB	ILE	B	293	-28.683	10.794	106.857	1.00	36.34
8413	CG1	ILE	B	293	-30.157	10.870	107.251	1.00	36.47
8414	CD1	ILE	B	293	-30.379	11.319	108.687	1.00	40.52
8415	CG2	ILE	B	293	-28.306	12.135	106.266	1.00	35.62
8416	C	ILE	B	293	-27.077	9.574	105.265	1.00	36.01
8417	O	ILE	B	293	-26.093	9.654	105.989	1.00	36.31
8418	N	GLN	B	294	-27.001	9.346	103.965	1.00	36.43
8419	CA	GLN	B	294	-25.757	9.005	103.287	1.00	36.06
8420	CB	GLN	B	294	-26.093	8.349	101.938	1.00	36.08
8421	CG	GLN	B	294	-26.959	7.108	102.114	1.00	34.91
8422	CD	GLN	B	294	-27.491	6.560	100.809	1.00	34.61
8423	OE1	GLN	B	294	-26.843	6.672	99.768	1.00	33.16
8424	NE2	GLN	B	294	-28.679	5.959	100.863	1.00	35.21
8425	C	GLN	B	294	-24.735	10.119	103.112	1.00	36.09
8426	O	GLN	B	294	-24.142	10.264	102.044	1.00	35.47
8427	N	ASN	B	295	-24.509	10.891	104.165	1.00	36.56
8428	CA	ASN	B	295	-23.471	11.917	104.111	1.00	36.97
8429	CB	ASN	B	295	-24.038	13.316	104.341	1.00	37.10
8430	CG	ASN	B	295	-24.717	13.480	105.691	1.00	37.40
8431	OD1	ASN	B	295	-24.703	12.590	106.552	1.00	35.93
8432	ND2	ASN	B	295	-25.325	14.642	105.877	1.00	43.29
8433	C	ASN	B	295	-22.326	11.614	105.073	1.00	37.07
8434	O	ASN	B	295	-21.448	12.444	105.305	1.00	36.84
8435	N	TYR	B	296	-22.337	10.400	105.610	1.00	37.36
8436	CA	TYR	B	296	-21.336	9.978	106.580	1.00	37.65
8437	CB	TYR	B	296	-21.884	10.220	107.987	1.00	37.75
8438	CG	TYR	B	296	-20.871	10.152	109.109	1.00	39.31
8439	CD1	TYR	B	296	-20.027	11.220	109.373	1.00	41.42
8440	CE1	TYR	B	296	-19.116	11.181	110.409	1.00	42.77
8441	CZ	TYR	B	296	-19.038	10.057	111.206	1.00	43.87
8442	OH	TYR	B	296	-18.131	10.018	112.245	1.00	47.04
8443	CE2	TYR	B	296	-19.867	8.981	110.970	1.00	43.23
8444	CD2	TYR	B	296	-20.781	9.037	109.923	1.00	41.78
8445	C	TYR	B	296	-20.998	8.498	106.417	1.00	37.35
8446	O	TYR	B	296	-21.827	7.637	106.653	1.00	37.45
8447	N	SER	B	297	-19.784	8.189	105.998	1.00	37.67
8448	CA	SER	B	297	-19.400	6.787	105.913	1.00	37.97
8449	CB	SER	B	297	-19.227	6.338	104.461	1.00	37.31
8450	OG	SER	B	297	-18.367	7.212	103.779	1.00	37.00
8451	C	SER	B	297	-18.118	6.569	106.677	1.00	38.36
8452	O	SER	B	297	-17.285	7.462	106.771	1.00	39.01
8453	N	VAL	B	298	-17.957	5.376	107.219	1.00	38.97
8454	CA	VAL	B	298	-16.748	5.050	107.936	1.00	39.42
8455	CB	VAL	B	298	-17.026	4.754	109.412	1.00	39.31
8456	CG1	VAL	B	298	-17.694	5.918	110.095	1.00	39.19

FIGURE 3 FJ

A	B	C	D	E	F	G	H	I	J
8457	CG2	VAL	B	298	-15.730	4.393	110.106	1.00	39.59
8458	C	VAL	B	298	-16.116	3.788	107.379	1.00	39.78
8459	O	VAL	B	298	-16.796	2.781	107.193	1.00	38.93
8460	N	MET	B	299	-14.809	3.840	107.130	1.00	40.58
8461	CA	MET	B	299	-14.084	2.641	106.752	1.00	41.10
8462	CB	MET	B	299	-13.045	2.919	105.678	1.00	40.94
8463	CG	MET	B	299	-12.122	1.725	105.482	1.00	42.37
8464	SD	MET	B	299	-10.984	1.874	104.140	1.00	45.66
8465	CE	MET	B	299	-10.533	3.507	104.278	1.00	45.39
8466	C	MET	B	299	-13.390	2.037	107.961	1.00	41.61
8467	O	MET	B	299	-12.568	2.691	108.603	1.00	42.63
8468	N	ASP	B	300	-13.746	0.807	108.295	1.00	41.81
8469	CA	ASP	B	300	-13.031	0.064	109.314	1.00	42.44
8470	CB	ASP	B	300	-13.962	-0.857	110.120	1.00	42.60
8471	CG	ASP	B	300	-14.521	-0.197	111.392	1.00	44.17
8472	OD1	ASP	B	300	-15.580	-0.658	111.884	1.00	45.87
8473	OD2	ASP	B	300	-13.981	0.768	111.978	1.00	43.48
8474	C	ASP	B	300	-12.001	-0.789	108.567	1.00	42.81
8475	O	ASP	B	300	-12.163	-1.091	107.371	1.00	42.31
8476	N	ILE	B	301	-10.939	-1.161	109.271	1.00	42.82
8477	CA	ILE	B	301	-9.903	-2.013	108.719	1.00	43.40
8478	CB	ILE	B	301	-8.680	-1.170	108.381	1.00	43.02
8479	CG1	ILE	B	301	-9.016	-0.280	107.189	1.00	41.96
8480	CD1	ILE	B	301	-8.020	0.789	106.904	1.00	41.81
8481	CG2	ILE	B	301	-7.495	-2.049	108.043	1.00	43.20
8482	C	ILE	B	301	-9.642	-3.065	109.775	1.00	44.39
8483	O	ILE	B	301	-9.149	-2.756	110.853	1.00	44.81
8484	N	CYS	B	302	-10.023	-4.303	109.488	1.00	45.55
8485	CA	CYS	B	302	-9.973	-5.363	110.497	1.00	46.76
8486	CB	CYS	B	302	-11.351	-6.028	110.644	1.00	46.70
8487	SG	CYS	B	302	-12.758	-4.879	110.687	1.00	49.41
8488	C	CYS	B	302	-8.911	-6.438	110.260	1.00	47.31
8489	O	CYS	B	302	-8.980	-7.221	109.299	1.00	47.48
8490	N	ASP	B	303	-7.934	-6.483	111.158	1.00	47.98
8491	CA	ASP	B	303	-6.888	-7.484	111.093	1.00	48.36
8492	CB	ASP	B	303	-5.607	-6.955	111.734	1.00	48.96
8493	CG	ASP	B	303	-4.750	-6.172	110.758	1.00	50.88
8494	OD1	ASP	B	303	-5.265	-5.232	110.121	1.00	53.09
8495	OD2	ASP	B	303	-3.543	-6.424	110.554	1.00	54.16
8496	C	ASP	B	303	-7.363	-8.755	111.786	1.00	48.00
8497	O	ASP	B	303	-8.117	-8.692	112.743	1.00	47.91
8498	N	TYR	B	304	-6.950	-9.908	111.269	1.00	48.08
8499	CA	TYR	B	304	-7.288	-11.200	111.857	1.00	47.82
8500	CB	TYR	B	304	-7.167	-12.283	110.794	1.00	47.24
8501	CG	TYR	B	304	-7.213	-13.681	111.340	1.00	45.86
8502	CD1	TYR	B	304	-8.400	-14.218	111.796	1.00	44.73
8503	CE1	TYR	B	304	-8.458	-15.489	112.298	1.00	44.26
8504	CZ	TYR	B	304	-7.317	-16.256	112.356	1.00	43.75
8505	OH	TYR	B	304	-7.406	-17.528	112.858	1.00	45.04
8506	CE2	TYR	B	304	-6.118	-15.757	111.916	1.00	43.24
8507	CD2	TYR	B	304	-6.069	-14.463	111.413	1.00	44.57

FIGURE 3 FK

A	B	C	D	E	F	G	H	I	J
8508	C	TYR	B	304	-6.313	-11.488	113.012	1.00	48.33
8509	O	TYR	B	304	-5.176	-11.027	112.975	1.00	47.62
8510	N	ASP	B	305	-6.753	-12.255	114.014	1.00	49.23
8511	CA	ASP	B	305	-5.940	-12.534	115.209	1.00	50.27
8512	CB	ASP	B	305	-6.649	-12.078	116.498	1.00	50.05
8513	CG	ASP	B	305	-5.713	-12.053	117.732	1.00	50.37
8514	OD1	ASP	B	305	-5.369	-13.129	118.279	1.00	49.56
8515	OD2	ASP	B	305	-5.288	-10.996	118.240	1.00	49.17
8516	C	ASP	B	305	-5.571	-13.996	115.331	1.00	51.26
8517	O	ASP	B	305	-6.420	-14.832	115.627	1.00	51.15
8518	N	GLU	B	306	-4.288	-14.281	115.108	1.00	52.94
8519	CA	GLU	B	306	-3.722	-15.619	115.228	1.00	54.25
8520	CB	GLU	B	306	-2.197	-15.522	115.380	1.00	54.85
8521	CG	GLU	B	306	-1.438	-15.115	114.130	1.00	56.89
8522	CD	GLU	B	306	-0.657	-16.271	113.543	1.00	59.93
8523	OE1	GLU	B	306	0.528	-16.072	113.180	1.00	61.01
8524	OE2	GLU	B	306	-1.227	-17.384	113.460	1.00	61.35
8525	C	GLU	B	306	-4.268	-16.341	116.447	1.00	54.31
8526	O	GLU	B	306	-4.751	-17.460	116.342	1.00	54.14
8527	N	SER	B	307	-4.182	-15.699	117.609	1.00	54.55
8528	CA	SER	B	307	-4.638	-16.342	118.842	1.00	54.92
8529	CB	SER	B	307	-3.919	-15.790	120.090	1.00	54.93
8530	CG	SER	B	307	-3.686	-14.391	120.021	1.00	54.98
8531	C	SER	B	307	-6.155	-16.344	119.016	1.00	54.94
8532	O	SER	B	307	-6.747	-17.396	119.262	1.00	55.07
8533	N	SER	B	308	-6.787	-15.180	118.896	1.00	55.09
8534	CA	SER	B	308	-8.242	-15.116	119.028	1.00	55.20
8535	CB	SER	B	308	-8.760	-13.703	118.753	1.00	55.20
8536	CG	SER	B	308	-8.050	-12.698	119.459	1.00	56.52
8537	C	SER	B	308	-8.907	-16.064	118.028	1.00	54.99
8538	O	SER	B	308	-9.639	-16.985	118.394	1.00	55.23
8539	N	GLY	B	309	-8.624	-15.839	116.752	1.00	54.51
8540	CA	GLY	B	309	-9.302	-16.561	115.692	1.00	53.83
8541	C	GLY	B	309	-10.396	-15.596	115.279	1.00	52.94
8542	O	GLY	B	309	-11.165	-15.839	114.348	1.00	53.23
8543	N	ARG	B	310	-10.440	-14.481	116.001	1.00	51.75
8544	CA	ARG	B	310	-11.400	-13.416	115.773	1.00	50.58
8545	CB	ARG	B	310	-11.784	-12.752	117.092	1.00	50.88
8546	CG	ARG	B	310	-12.907	-13.443	117.792	1.00	54.09
8547	CD	ARG	B	310	-12.707	-13.618	119.270	1.00	59.77
8548	NE	ARG	B	310	-13.888	-14.230	119.871	1.00	64.94
8549	CZ	ARG	B	310	-14.863	-13.542	120.464	1.00	67.93
8550	NH1	ARG	B	310	-14.792	-12.215	120.536	1.00	68.66
8551	NH2	ARG	B	310	-15.910	-14.178	120.985	1.00	68.59
8552	C	ARG	B	310	-10.793	-12.367	114.899	1.00	48.86
8553	O	ARG	B	310	-9.614	-12.413	114.581	1.00	48.77
8554	N	TRP	B	311	-11.623	-11.401	114.541	1.00	47.08
8555	CA	TRP	B	311	-11.215	-10.279	113.733	1.00	45.09
8556	CB	TRP	B	311	-12.079	-10.231	112.477	1.00	44.10
8557	CG	TRP	B	311	-11.753	-11.328	111.540	1.00	40.23
8558	CD1	TRP	B	311	-12.191	-12.618	111.588	1.00	37.52

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 FL**

A	B	C	D	E	F	G	H	I	J
8559	NE1	TRP	B	311	-11.646	-13.342	110.554	1.00	35.32
8560	CE2	TRP	B	311	-10.842	-12.511	109.815	1.00	34.42
8561	CD2	TRP	B	311	-10.883	-11.242	110.415	1.00	36.23
8562	CE3	TRP	B	311	-10.135	-10.212	109.847	1.00	35.26
8563	CZ3	TRP	B	311	-9.388	-10.477	108.730	1.00	35.47
8564	CH2	TRP	B	311	-9.371	-11.744	108.158	1.00	34.18
8565	CZ2	TRP	B	311	-10.092	-12.771	108.684	1.00	34.45
8566	C	TRP	B	311	-11.373	-9.005	114.551	1.00	44.85
8567	O	TRP	B	311	-12.338	-8.859	115.290	1.00	44.57
8568	N	ASN	B	312	-10.435	-8.083	114.409	1.00	44.33
8569	CA	ASN	B	312	-10.464	-6.862	115.187	1.00	44.71
8570	CB	ASN	B	312	-9.411	-6.911	116.303	1.00	44.96
8571	CG	ASN	B	312	-9.768	-7.883	117.398	1.00	44.98
8572	OD1	ASN	B	312	-10.562	-7.564	118.281	1.00	46.84
8573	ND2	ASN	B	312	-9.172	-9.072	117.361	1.00	43.43
8574	C	ASN	B	312	-10.179	-5.663	114.322	1.00	44.80
8575	O	ASN	B	312	-9.282	-5.690	113.496	1.00	44.20
8576	N	CYS	B	313	-10.933	-4.600	114.557	1.00	45.52
8577	CA	CYS	B	313	-10.814	-3.376	113.800	1.00	46.35
8578	CB	CYS	B	313	-12.188	-3.018	113.208	1.00	46.62
8579	SG	CYS	B	313	-13.193	-4.443	112.629	1.00	46.14
8580	C	CYS	B	313	-10.324	-2.266	114.724	1.00	47.10
8581	O	CYS	B	313	-11.070	-1.801	115.576	1.00	47.66
8582	N	LEU	B	314	-9.078	-1.834	114.564	1.00	47.75
8583	CA	LEU	B	314	-8.548	-0.787	115.433	1.00	48.41
8584	CB	LEU	B	314	-7.026	-0.667	115.314	1.00	48.43
8585	CG	LEU	B	314	-6.124	-1.561	116.168	1.00	48.67
8586	CD1	LEU	B	314	-5.616	-2.768	115.399	1.00	50.57
8587	CD2	LEU	B	314	-6.808	-1.971	117.463	1.00	49.11
8588	C	LEU	B	314	-9.187	0.558	115.132	1.00	48.75
8589	O	LEU	B	314	-9.092	1.062	114.018	1.00	48.76
8590	N	VAL	B	315	-9.801	1.149	116.151	1.00	49.18
8591	CA	VAL	B	315	-10.499	2.421	116.018	1.00	49.37
8592	CB	VAL	B	315	-11.083	2.893	117.372	1.00	49.62
8593	CG1	VAL	B	315	-11.938	4.144	117.179	1.00	50.08
8594	CG2	VAL	B	315	-11.919	1.786	117.997	1.00	49.65
8595	C	VAL	B	315	-9.654	3.525	115.398	1.00	49.37
8596	O	VAL	B	315	-10.187	4.429	114.752	1.00	49.79
8597	N	ALA	B	316	-8.341	3.444	115.583	1.00	49.29
8598	CA	ALA	B	316	-7.413	4.427	115.030	1.00	48.81
8599	CB	ALA	B	316	-6.150	4.498	115.880	1.00	49.17
8600	C	ALA	B	316	-7.066	4.074	113.591	1.00	48.87
8601	O	ALA	B	316	-6.333	4.802	112.908	1.00	48.88
8602	N	ARG	B	317	-7.574	2.935	113.131	1.00	48.37
8603	CA	ARG	B	317	-7.394	2.577	111.738	1.00	47.78
8604	CB	ARG	B	317	-6.927	1.122	111.575	1.00	47.56
8605	CG	ARG	B	317	-5.690	0.780	112.408	1.00	47.78
8606	CD	ARG	B	317	-4.586	-0.009	111.677	1.00	47.51
8607	NE	ARG	B	317	-4.763	-1.451	111.784	1.00	47.32
8608	CZ	ARG	B	317	-3.766	-2.328	111.773	1.00	48.74
8609	NH1	ARG	B	317	-4.025	-3.627	111.879	1.00	47.96

FIGURE 3 FM

A	B	C	D	E	F	G	H	I	J
8610	NH2	ARG	B	317	-2.506	-1.911	111.658	1.00	48.95
8611	C	ARG	B	317	-8.705	2.868	110.996	1.00	47.39
8612	O	ARG	B	317	-8.864	2.486	109.840	1.00	47.78
8613	N	GLN	B	318	-9.634	3.547	111.672	1.00	46.34
8614	CA	GLN	B	318	-10.901	3.950	111.065	1.00	45.47
8615	CB	GLN	B	318	-11.967	4.243	112.118	1.00	45.18
8616	CG	GLN	B	318	-12.715	3.030	112.621	1.00	44.04
8617	CD	GLN	B	318	-13.832	3.384	113.596	1.00	43.62
8618	OE1	GLN	B	318	-14.374	2.495	114.270	1.00	43.11
8619	NE2	GLN	B	318	-14.172	4.679	113.685	1.00	41.17
8620	C	GLN	B	318	-10.729	5.197	110.232	1.00	45.42
8621	O	GLN	B	318	-10.027	6.119	110.625	1.00	45.28
8622	N	HIS	B	319	-11.380	5.234	109.075	1.00	45.21
8623	CA	HIS	B	319	-11.326	6.430	108.251	1.00	44.70
8624	CB	HIS	B	319	-10.573	6.159	106.953	1.00	44.42
8625	CG	HIS	B	319	-9.144	5.768	107.164	1.00	44.37
8626	ND1	HIS	B	319	-8.777	4.603	107.805	1.00	43.47
8627	CE1	HIS	B	319	-7.460	4.525	107.853	1.00	44.31
8628	NE2	HIS	B	319	-6.958	5.602	107.271	1.00	44.70
8629	CD2	HIS	B	319	-7.990	6.400	106.840	1.00	43.53
8630	C	HIS	B	319	-12.745	6.937	108.001	1.00	44.84
8631	O	HIS	B	319	-13.652	6.170	107.666	1.00	44.74
8632	N	ILE	B	320	-12.939	8.232	108.195	1.00	44.88
8633	CA	ILE	B	320	-14.245	8.819	108.005	1.00	44.83
8634	CB	ILE	B	320	-14.574	9.781	109.152	1.00	45.25
8635	CG1	ILE	B	320	-14.665	9.023	110.477	1.00	45.63
8636	CD1	ILE	B	320	-14.781	9.948	111.666	1.00	48.51
8637	CG2	ILE	B	320	-15.872	10.531	108.868	1.00	44.08
8638	C	ILE	B	320	-14.273	9.566	106.699	1.00	44.62
8639	O	ILE	B	320	-13.342	10.288	106.375	1.00	44.36
8640	N	GLU	B	321	-15.338	9.357	105.936	1.00	44.42
8641	CA	GLU	B	321	-15.548	10.101	104.704	1.00	44.18
8642	CB	GLU	B	321	-15.402	9.201	103.472	1.00	44.12
8643	CG	GLU	B	321	-15.275	9.966	102.163	1.00	43.27
8644	CD	GLU	B	321	-15.257	9.052	100.951	1.00	43.57
8645	OE1	GLU	B	321	-14.829	7.884	101.090	1.00	43.88
8646	OE2	GLU	B	321	-15.670	9.502	99.857	1.00	43.47
8647	C	GLU	B	321	-16.945	10.714	104.786	1.00	44.02
8648	O	GLU	B	321	-17.956	10.000	104.813	1.00	44.24
8649	N	MET	B	322	-16.971	12.043	104.825	1.00	43.51
8650	CA	MET	B	322	-18.170	12.840	105.001	1.00	42.63
8651	CB	MET	B	322	-17.965	13.755	106.206	1.00	43.28
8652	CG	MET	B	322	-18.418	13.265	107.548	1.00	45.74
8653	SD	MET	B	322	-17.791	14.488	108.767	1.00	52.31
8654	CE	MET	B	322	-17.696	15.985	107.722	1.00	51.74
8655	C	MET	B	322	-18.349	13.779	103.829	1.00	41.53
8656	O	MET	B	322	-17.427	14.007	103.064	1.00	41.26
8657	N	SER	B	323	-19.533	14.368	103.729	1.00	40.61
8658	CA	SER	B	323	-19.809	15.388	102.728	1.00	40.06
8659	CB	SER	B	323	-20.495	14.804	101.495	1.00	39.82
8660	OG	SER	B	323	-20.860	15.850	100.604	1.00	39.09

FIGURE 3 FN

A	B	C	D	E	F	G	H	I	J
8661	C	SER	B	323	-20.730	16.421	103.350	1.00	39.95
8662	O	SER	B	323	-21.649	16.074	104.081	1.00	39.28
8663	N	THR	B	324	-20.493	17.690	103.068	1.00	40.39
8664	CA	THR	B	324	-21.361	18.719	103.634	1.00	40.95
8665	CB	THR	B	324	-20.553	19.794	104.399	1.00	41.44
8666	OG1	THR	B	324	-19.536	20.339	103.544	1.00	43.72
8667	CG2	THR	B	324	-19.757	19.151	105.520	1.00	41.41
8668	C	THR	B	324	-22.203	19.344	102.548	1.00	40.11
8669	O	THR	B	324	-23.164	20.032	102.842	1.00	40.55
8670	N	THR	B	325	-21.835	19.094	101.293	1.00	39.33
8671	CA	THR	B	325	-22.586	19.587	100.141	1.00	38.58
8672	CB	THR	B	325	-21.634	19.908	98.977	1.00	38.55
8673	OG1	THR	B	325	-20.674	18.849	98.844	1.00	38.96
8674	CG2	THR	B	325	-20.770	21.122	99.305	1.00	40.01
8675	C	THR	B	325	-23.631	18.578	99.638	1.00	37.87
8676	O	THR	B	325	-24.496	18.934	98.859	1.00	38.08
8677	N	GLY	B	326	-23.534	17.321	100.063	1.00	37.04
8678	CA	GLY	B	326	-24.430	16.294	99.578	1.00	35.41
8679	C	GLY	B	326	-24.145	14.931	100.169	1.00	34.41
8680	O	GLY	B	326	-23.908	14.818	101.362	1.00	34.80
8681	N	TRP	B	327	-24.190	13.890	99.339	1.00	33.13
8682	CA	TRP	B	327	-23.973	12.527	99.803	1.00	31.83
8683	CB	TRP	B	327	-24.906	11.567	99.049	1.00	31.57
8684	CG	TRP	B	327	-24.661	11.606	97.556	1.00	29.42
8685	CD1	TRP	B	327	-23.879	10.756	96.840	1.00	27.20
8686	NE1	TRP	B	327	-23.846	11.133	95.523	1.00	26.93
8687	CE2	TRP	B	327	-24.626	12.246	95.361	1.00	27.08
8688	CD2	TRP	B	327	-25.146	12.579	96.627	1.00	27.38
8689	CE3	TRP	B	327	-25.991	13.693	96.729	1.00	27.46
8690	CZ3	TRP	B	327	-26.273	14.432	95.588	1.00	23.17
8691	CH2	TRP	B	327	-25.728	14.078	94.347	1.00	26.08
8692	CZ2	TRP	B	327	-24.915	12.985	94.209	1.00	26.03
8693	C	TRP	B	327	-22.505	12.175	99.551	1.00	31.86
8694	O	TRP	B	327	-21.758	12.966	98.982	1.00	31.37
8695	N	VAL	B	328	-22.076	10.995	99.975	1.00	32.34
8696	CA	VAL	B	328	-20.684	10.613	99.737	1.00	32.69
8697	CB	VAL	B	328	-20.008	10.076	101.002	1.00	32.65
8698	CG1	VAL	B	328	-20.961	9.213	101.787	1.00	34.01
8699	CG2	VAL	B	328	-18.748	9.308	100.656	1.00	32.32
8700	C	VAL	B	328	-20.556	9.605	98.596	1.00	32.55
8701	O	VAL	B	328	-21.282	8.627	98.536	1.00	32.19
8702	N	GLY	B	329	-19.602	9.859	97.714	1.00	32.82
8703	CA	GLY	B	329	-19.337	9.004	96.583	1.00	33.09
8704	C	GLY	B	329	-20.211	9.452	95.439	1.00	33.00
8705	O	GLY	B	329	-21.127	10.267	95.620	1.00	33.18
8706	N	ARG	B	330	-19.919	8.952	94.252	1.00	32.66
8707	CA	ARG	B	330	-20.744	9.287	93.113	1.00	32.38
8708	CB	ARG	B	330	-20.031	8.938	91.811	1.00	32.77
8709	CG	ARG	B	330	-18.974	9.987	91.488	1.00	34.36
8710	CD	ARG	B	330	-18.411	9.943	90.087	1.00	34.91
8711	NE	ARG	B	330	-17.190	9.165	90.101	1.00	37.09

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 FO**

A	B	C	D	E	F	G	H	I	J
8712	CZ	ARG	B	330	-16.013	9.583	89.674	1.00	36.34
8713	NH1	ARG	B	330	-15.001	8.751	89.760	1.00	39.45
8714	NH2	ARG	B	330	-15.844	10.792	89.147	1.00	34.94
8715	C	ARG	B	330	-22.103	8.612	93.302	1.00	31.87
8716	O	ARG	B	330	-23.128	9.229	93.100	1.00	32.19
8717	N	PHE	B	331	-22.105	7.364	93.746	1.00	31.31
8718	CA	PHE	B	331	-23.333	6.687	94.119	1.00	31.39
8719	CB	PHE	B	331	-23.792	5.693	93.043	1.00	30.66
8720	CG	PHE	B	331	-24.187	6.347	91.758	1.00	28.41
8721	CD1	PHE	B	331	-25.503	6.715	91.530	1.00	26.38
8722	CE1	PHE	B	331	-25.873	7.333	90.339	1.00	27.31
8723	CZ	PHE	B	331	-24.910	7.608	89.371	1.00	25.31
8724	CE2	PHE	B	331	-23.600	7.260	89.598	1.00	27.02
8725	CD2	PHE	B	331	-23.238	6.631	90.790	1.00	26.92
8726	C	PHE	B	331	-23.120	5.997	95.461	1.00	32.56
8727	O	PHE	B	331	-24.067	5.720	96.193	1.00	33.56
8728	N	ARG	B	332	-21.865	5.712	95.782	1.00	33.38
8729	CA	ARG	B	332	-21.520	5.072	97.044	1.00	33.89
8730	CB	ARG	B	332	-21.739	3.555	96.970	1.00	34.01
8731	CG	ARG	B	332	-20.838	2.816	95.989	1.00	34.01
8732	CD	ARG	B	332	-21.325	1.427	95.626	1.00	36.66
8733	NE	ARG	B	332	-22.754	1.443	95.271	1.00	39.82
8734	CZ	ARG	B	332	-23.231	1.668	94.046	1.00	39.18
8735	NH1	ARG	B	332	-22.403	1.884	93.028	1.00	37.21
8736	NH2	ARG	B	332	-24.542	1.682	93.841	1.00	39.54
8737	C	ARG	B	332	-20.067	5.368	97.324	1.00	34.48
8738	O	ARG	B	332	-19.296	5.630	96.401	1.00	34.41
8739	N	PRO	B	333	-19.684	5.348	98.595	1.00	35.25
8740	CA	PRO	B	333	-18.285	5.587	98.952	1.00	35.46
8741	CB	PRO	B	333	-18.184	5.045	100.382	1.00	35.54
8742	CG	PRO	B	333	-19.574	5.147	100.936	1.00	36.38
8743	CD	PRO	B	333	-20.542	5.116	99.772	1.00	35.16
8744	C	PRO	B	333	-17.409	4.763	98.033	1.00	35.43
8745	O	PRO	B	333	-17.645	3.585	97.878	1.00	36.30
8746	N	SER	B	334	-16.399	5.360	97.435	1.00	35.72
8747	CA	SER	B	334	-15.526	4.607	96.552	1.00	36.00
8748	CB	SER	B	334	-14.561	5.533	95.844	1.00	36.20
8749	OG	SER	B	334	-14.557	5.196	94.469	1.00	38.91
8750	C	SER	B	334	-14.749	3.472	97.217	1.00	35.87
8751	O	SER	B	334	-14.614	3.403	98.458	1.00	35.58
8752	N	GLU	B	335	-14.227	2.587	96.373	1.00	35.21
8753	CA	GLU	B	335	-13.488	1.443	96.862	1.00	34.87
8754	CB	GLU	B	335	-13.756	0.208	96.003	1.00	35.20
8755	CG	GLU	B	335	-12.934	0.113	94.729	1.00	36.16
8756	CD	GLU	B	335	-13.390	1.083	93.659	1.00	39.30
8757	OE1	GLU	B	335	-14.592	1.443	93.662	1.00	41.87
8758	OE2	GLU	B	335	-12.550	1.484	92.810	1.00	39.58
8759	C	GLU	B	335	-11.989	1.760	96.926	1.00	34.43
8760	O	GLU	B	335	-11.448	2.475	96.078	1.00	33.63
8761	N	PRO	B	336	-11.334	1.232	97.951	1.00	34.00
8762	CA	PRO	B	336	-9.905	1.450	98.140	1.00	34.58



FIGURE 3 FP

A	B	C	D	E	F	G	H	I	J
8763	CB	PRO	B	336	-9.767	1.320	99.651	1.00	34.64
8764	CG	PRO	B	336	-10.730	0.199	99.975	1.00	34.28
8765	CD	PRO	B	336	-11.901	0.390	99.021	1.00	33.04
8766	C	PRO	B	336	-9.079	0.364	97.449	1.00	35.06
8767	O	PRO	B	336	-9.509	-0.787	97.352	1.00	34.53
8768	N	HIS	B	337	-7.907	0.758	96.970	1.00	35.64
8769	CA	HIS	B	337	-6.964	-0.148	96.345	1.00	36.77
8770	CB	HIS	B	337	-6.699	0.280	94.915	1.00	36.73
8771	CG	HIS	B	337	-7.931	0.289	94.073	1.00	39.21
8772	ND1	HIS	B	337	-8.265	-0.754	93.238	1.00	41.51
8773	CE1	HIS	B	337	-9.405	-0.477	92.629	1.00	41.54
8774	NE2	HIS	B	337	-9.830	0.699	93.054	1.00	41.98
8775	CD2	HIS	B	337	-8.926	1.201	93.957	1.00	40.47
8776	C	HIS	B	337	-5.678	-0.177	97.169	1.00	36.72
8777	O	HIS	B	337	-4.917	0.780	97.208	1.00	36.00
8778	N	PHE	B	338	-5.460	-1.301	97.822	1.00	37.60
8779	CA	PHE	B	338	-4.348	-1.477	98.735	1.00	38.65
8780	CB	PHE	B	338	-4.719	-2.573	99.715	1.00	38.15
8781	CG	PHE	B	338	-5.756	-2.160	100.697	1.00	38.45
8782	CD1	PHE	B	338	-7.101	-2.326	100.416	1.00	38.31
8783	CE1	PHE	B	338	-8.057	-1.942	101.328	1.00	36.65
8784	CZ	PHE	B	338	-7.685	-1.381	102.517	1.00	36.84
8785	CE2	PHE	B	338	-6.346	-1.206	102.812	1.00	37.23
8786	CD2	PHE	B	338	-5.394	-1.598	101.908	1.00	38.29
8787	C	PHE	B	338	-3.016	-1.826	98.088	1.00	39.48
8788	O	PHE	B	338	-2.961	-2.497	97.063	1.00	40.08
8789	N	THR	B	339	-1.936	-1.363	98.704	1.00	40.67
8790	CA	THR	B	339	-0.603	-1.718	98.258	1.00	41.39
8791	CB	THR	B	339	0.438	-0.866	98.951	1.00	41.43
8792	OG1	THR	B	339	0.165	-0.881	100.357	1.00	41.21
8793	CG2	THR	B	339	0.302	0.588	98.559	1.00	40.00
8794	C	THR	B	339	-0.422	-3.128	98.744	1.00	42.42
8795	O	THR	B	339	-1.115	-3.563	99.659	1.00	42.69
8796	N	LEU	B	340	0.531	-3.831	98.156	1.00	43.57
8797	CA	LEU	B	340	0.808	-5.214	98.528	1.00	44.63
8798	CB	LEU	B	340	2.094	-5.680	97.841	1.00	44.77
8799	CG	LEU	B	340	2.175	-7.175	97.554	1.00	45.78
8800	CD1	LEU	B	340	0.971	-7.604	96.719	1.00	45.59
8801	CD2	LEU	B	340	2.274	-7.983	98.841	1.00	46.02
8802	C	LEU	B	340	0.906	-5.461	100.041	1.00	44.89
8803	O	LEU	B	340	0.349	-6.434	100.547	1.00	44.86
8804	N	ASP	B	341	1.625	-4.612	100.769	1.00	45.45
8805	CA	ASP	B	341	1.764	-4.846	102.213	1.00	46.18
8806	CB	ASP	B	341	2.986	-4.126	102.789	1.00	46.25
8807	CG	ASP	B	341	2.823	-2.616	102.818	1.00	47.91
8808	OD1	ASP	B	341	3.832	-1.924	103.116	1.00	47.25
8809	OD2	ASP	B	341	1.738	-2.033	102.562	1.00	48.84
8810	C	ASP	B	341	0.495	-4.530	103.026	1.00	46.03
8811	O	ASP	B	341	0.415	-4.827	104.221	1.00	46.41
8812	N	GLY	B	342	-0.488	-3.919	102.379	1.00	45.84
8813	CA	GLY	B	342	-1.758	-3.626	103.021	1.00	45.65

FIGURE 3 FQ

A	B	C	D	E	F	G	H	I	J
8814	C	GLY	B	342	-1.731	-2.603	104.143	1.00	45.30
8815	O	GLY	B	342	-2.662	-2.529	104.947	1.00	45.37
8816	N	ASN	B	343	-0.676	-1.807	104.219	1.00	44.73
8817	CA	ASN	B	343	-0.629	-0.800	105.271	1.00	44.46
8818	CB	ASN	B	343	0.774	-0.661	105.862	1.00	44.15
8819	CG	ASN	B	343	1.336	-1.968	106.356	1.00	44.36
8820	OD1	ASN	B	343	0.704	-2.684	107.138	1.00	44.47
8821	ND2	ASN	B	343	2.548	-2.285	105.911	1.00	44.77
8822	C	ASN	B	343	-1.054	0.523	104.675	1.00	44.12
8823	O	ASN	B	343	-1.257	1.507	105.381	1.00	43.99
8824	N	SER	B	344	-1.184	0.534	103.358	1.00	43.76
8825	CA	SER	B	344	-1.531	1.752	102.652	1.00	43.78
8826	CB	SER	B	344	-0.274	2.306	102.002	1.00	43.62
8827	OG	SER	B	344	-0.444	3.664	101.675	1.00	45.00
8828	C	SER	B	344	-2.609	1.496	101.588	1.00	43.53
8829	O	SER	B	344	-2.904	0.334	101.262	1.00	43.57
8830	N	PHE	B	345	-3.204	2.564	101.051	1.00	43.02
8831	CA	PHE	B	345	-4.193	2.404	99.982	1.00	42.73
8832	CB	PHE	B	345	-5.463	1.708	100.477	1.00	42.42
8833	CG	PHE	B	345	-6.288	2.536	101.424	1.00	42.37
8834	CD1	PHE	B	345	-7.127	3.534	100.950	1.00	40.54
8835	CE1	PHE	B	345	-7.890	4.283	101.808	1.00	39.15
8836	CZ	PHE	B	345	-7.834	4.047	103.150	1.00	39.99
8837	CE2	PHE	B	345	-7.009	3.041	103.647	1.00	40.96
8838	CD2	PHE	B	345	-6.247	2.294	102.787	1.00	41.13
8839	C	PHE	B	345	-4.560	3.670	99.229	1.00	42.73
8840	O	PHE	B	345	-4.367	4.784	99.718	1.00	42.82
8841	N	TYR	B	346	-5.094	3.475	98.028	1.00	42.41
8842	CA	TYR	B	346	-5.538	4.575	97.186	1.00	42.60
8843	CB	TYR	B	346	-4.828	4.545	95.832	1.00	42.55
8844	CG	TYR	B	346	-3.336	4.654	95.945	1.00	42.22
8845	CD1	TYR	B	346	-2.692	5.861	95.724	1.00	41.32
8846	CE1	TYR	B	346	-1.325	5.965	95.832	1.00	42.58
8847	CZ	TYR	B	346	-0.579	4.854	96.173	1.00	42.02
8848	OH	TYR	B	346	0.789	4.953	96.290	1.00	42.68
8849	CE2	TYR	B	346	-1.196	3.651	96.411	1.00	42.43
8850	CD2	TYR	B	346	-2.570	3.557	96.293	1.00	43.21
8851	C	TYR	B	346	-7.030	4.478	96.968	1.00	42.36
8852	O	TYR	B	346	-7.555	3.384	96.723	1.00	42.86
8853	N	LYS	B	347	-7.716	5.610	97.088	1.00	42.04
8854	CA	LYS	B	347	-9.150	5.665	96.822	1.00	41.82
8855	CB	LYS	B	347	-9.987	5.164	98.006	1.00	42.17
8856	CG	LYS	B	347	-10.372	6.206	99.028	1.00	43.16
8857	CD	LYS	B	347	-11.873	6.369	99.137	1.00	43.24
8858	CE	LYS	B	347	-12.459	5.513	100.242	1.00	41.92
8859	NZ	LYS	B	347	-13.922	5.833	100.429	1.00	41.44
8860	C	LYS	B	347	-9.550	7.062	96.421	1.00	41.46
8861	O	LYS	B	347	-9.000	8.045	96.922	1.00	41.71
8862	N	ILE	B	348	-10.490	7.130	95.482	1.00	40.49
8863	CA	ILE	B	348	-11.010	8.373	94.970	1.00	39.65
8864	CB	ILE	B	348	-11.719	8.109	93.658	1.00	39.99

FIGURE 3 FR

A	B	C	D	E	F	G	H	I	J
8865	CG1	ILE	B	348	-10.751	7.503	92.647	1.00	40.33
8866	CD1	ILE	B	348	-11.423	7.141	91.328	1.00	42.02
8867	CG2	ILE	B	348	-12.336	9.373	93.106	1.00	40.21
8868	C	ILE	B	348	-11.974	8.990	95.977	1.00	39.56
8869	O	ILE	B	348	-12.813	8.294	96.551	1.00	39.35
8870	N	ILE	B	349	-11.795	10.286	96.219	1.00	39.00
8871	CA	ILE	B	349	-12.626	11.081	97.108	1.00	39.16
8872	CB	ILE	B	349	-12.082	11.126	98.552	1.00	39.04
8873	CG1	ILE	B	349	-10.612	11.520	98.585	1.00	39.64
8874	CD1	ILE	B	349	-10.139	11.936	99.982	1.00	39.54
8875	CG2	ILE	B	349	-12.281	9.819	99.263	1.00	39.93
8876	C	ILE	B	349	-12.639	12.488	96.547	1.00	39.03
8877	O	ILE	B	349	-11.775	12.846	95.746	1.00	39.19
8878	N	SER	B	350	-13.617	13.293	96.938	1.00	39.08
8879	CA	SER	B	350	-13.647	14.653	96.434	1.00	39.74
8880	CB	SER	B	350	-15.039	15.257	96.516	1.00	39.37
8881	OG	SER	B	350	-15.721	14.721	97.617	1.00	40.57
8882	C	SER	B	350	-12.652	15.487	97.206	1.00	40.13
8883	O	SER	B	350	-12.518	15.327	98.421	1.00	39.82
8884	N	ASN	B	351	-11.956	16.363	96.487	1.00	40.90
8885	CA	ASN	B	351	-10.946	17.212	97.094	1.00	42.48
8886	CB	ASN	B	351	-9.810	17.506	96.111	1.00	41.86
8887	CG	ASN	B	351	-10.220	18.438	95.019	1.00	40.95
8888	OD1	ASN	B	351	-11.304	19.019	95.058	1.00	40.08
8889	ND2	ASN	B	351	-9.352	18.598	94.024	1.00	40.40
8890	C	ASN	B	351	-11.525	18.503	97.656	1.00	43.74
8891	O	ASN	B	351	-12.732	18.743	97.573	1.00	44.49
8892	N	GLU	B	352	-10.650	19.325	98.227	1.00	45.07
8893	CA	GLU	B	352	-11.040	20.589	98.853	1.00	46.08
8894	CB	GLU	B	352	-9.803	21.451	99.160	1.00	46.33
8895	CG	GLU	B	352	-8.980	21.843	97.933	1.00	48.13
8896	CD	GLU	B	352	-8.169	20.681	97.364	1.00	50.83
8897	OE1	GLU	B	352	-7.816	20.729	96.157	1.00	50.33
8898	OE2	GLU	B	352	-7.884	19.713	98.125	1.00	51.22
8899	C	GLU	B	352	-12.017	21.378	97.999	1.00	46.10
8900	O	GLU	B	352	-12.918	22.038	98.517	1.00	46.29
8901	N	GLU	B	353	-11.847	21.307	96.686	1.00	46.18
8902	CA	GLU	B	353	-12.728	22.052	95.808	1.00	46.03
8903	CB	GLU	B	353	-11.936	22.862	94.784	1.00	46.58
8904	CG	GLU	B	353	-10.661	22.220	94.278	1.00	49.12
8905	CD	GLU	B	353	-10.141	22.953	93.063	1.00	53.08
8906	OE1	GLU	B	353	-10.498	24.144	92.921	1.00	54.96
8907	OE2	GLU	B	353	-9.408	22.346	92.241	1.00	55.30
8908	C	GLU	B	353	-13.824	21.223	95.132	1.00	45.23
8909	O	GLU	B	353	-14.458	21.690	94.186	1.00	45.19
8910	N	GLY	B	354	-14.048	20.004	95.609	1.00	44.03
8911	CA	GLY	B	354	-15.155	19.210	95.103	1.00	42.61
8912	C	GLY	B	354	-14.896	18.382	93.857	1.00	41.84
8913	O	GLY	B	354	-15.818	17.772	93.292	1.00	41.34
8914	N	TYR	B	355	-13.647	18.366	93.407	1.00	40.95
8915	CA	TYR	B	355	-13.290	17.519	92.280	1.00	39.61

FIGURE 3 FS

A	B	C	D	E	F	G	H	I	J
8916	CB	TYR	B	355	-12.291	18.191	91.363	1.00	39.28
8917	CG	TYR	B	355	-12.919	19.335	90.611	1.00	38.85
8918	CD1	TYR	B	355	-12.950	20.610	91.156	1.00	38.45
8919	CE1	TYR	B	355	-13.539	21.664	90.483	1.00	37.46
8920	CZ	TYR	B	355	-14.109	21.448	89.248	1.00	37.71
8921	OH	TYR	B	355	-14.690	22.508	88.578	1.00	35.87
8922	CE2	TYR	B	355	-14.103	20.178	88.689	1.00	37.54
8923	CD2	TYR	B	355	-13.517	19.135	89.375	1.00	38.66
8924	C	TYR	B	355	-12.795	16.207	92.830	1.00	38.85
8925	O	TYR	B	355	-12.126	16.172	93.859	1.00	38.81
8926	N	ARG	B	356	-13.195	15.119	92.183	1.00	37.98
8927	CA	ARG	B	356	-12.839	13.791	92.672	1.00	36.90
8928	CB	ARG	B	356	-13.934	12.771	92.344	1.00	36.89
8929	CG	ARG	B	356	-15.072	12.844	93.340	1.00	36.55
8930	CD	ARG	B	356	-16.371	12.194	92.916	1.00	35.78
8931	NE	ARG	B	356	-17.475	12.940	93.499	1.00	37.53
8932	CZ	ARG	B	356	-17.933	12.767	94.735	1.00	37.72
8933	NH1	ARG	B	356	-17.421	11.829	95.514	1.00	36.53
8934	NH2	ARG	B	356	-18.924	13.530	95.186	1.00	38.36
8935	C	ARG	B	356	-11.477	13.346	92.182	1.00	35.86
8936	O	ARG	B	356	-11.201	13.308	90.989	1.00	35.34
8937	N	HIS	B	357	-10.622	13.013	93.129	1.00	35.61
8938	CA	HIS	B	357	-9.268	12.639	92.797	1.00	35.35
8939	CB	HIS	B	357	-8.361	13.854	92.922	1.00	34.69
8940	CG	HIS	B	357	-8.491	14.797	91.777	1.00	31.97
8941	ND1	HIS	B	357	-7.876	14.577	90.569	1.00	29.99
8942	CE1	HIS	B	357	-8.186	15.552	89.734	1.00	30.81
8943	NE2	HIS	B	357	-8.992	16.392	90.357	1.00	30.84
8944	CD2	HIS	B	357	-9.207	15.936	91.635	1.00	31.68
8945	C	HIS	B	357	-8.772	11.511	93.666	1.00	36.43
8946	O	HIS	B	357	-9.428	11.110	94.634	1.00	35.70
8947	N	ILE	B	358	-7.602	11.000	93.307	1.00	37.92
8948	CA	ILE	B	358	-7.014	9.897	94.041	1.00	39.58
8949	CB	ILE	B	358	-6.043	9.143	93.142	1.00	39.62
8950	CG1	ILE	B	358	-6.726	8.773	91.823	1.00	39.16
8951	CD1	ILE	B	358	-5.780	8.118	90.858	1.00	40.18
8952	CG2	ILE	B	358	-5.518	7.925	93.865	1.00	38.65
8953	C	ILE	B	358	-6.285	10.376	95.284	1.00	40.60
8954	O	ILE	B	358	-5.345	11.143	95.200	1.00	40.23
8955	N	CYS	B	359	-6.728	9.911	96.440	1.00	42.66
8956	CA	CYS	B	359	-6.073	10.277	97.677	1.00	44.79
8957	CB	CYS	B	359	-7.078	10.791	98.712	1.00	44.98
8958	SG	CYS	B	359	-6.425	12.181	99.684	1.00	50.06
8959	C	CYS	B	359	-5.301	9.070	98.201	1.00	45.23
8960	O	CYS	B	359	-5.806	7.945	98.200	1.00	44.97
8961	N	TYR	B	360	-4.068	9.313	98.633	1.00	45.97
8962	CA	TYR	B	360	-3.203	8.253	99.133	1.00	46.80
8963	CB	TYR	B	360	-1.767	8.506	98.666	1.00	47.14
8964	CG	TYR	B	360	-0.755	7.530	99.201	1.00	48.65
8965	CD1	TYR	B	360	0.432	7.978	99.778	1.00	50.02
8966	CE1	TYR	B	360	1.363	7.089	100.275	1.00	50.74

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 FT**

A	B	C	D	E	F	G	H	I	J
8967	CZ	TYR	B	360	1.109	5.737	100.199	1.00	50.96
8968	OH	TYR	B	360	2.029	4.836	100.683	1.00	52.69
8969	CE2	TYR	B	360	-0.059	5.273	99.629	1.00	50.11
8970	CD2	TYR	B	360	-0.981	6.166	99.138	1.00	48.61
8971	C	TYR	B	360	-3.308	8.163	100.652	1.00	47.03
8972	O	TYR	B	360	-3.100	9.141	101.356	1.00	47.17
8973	N	PHE	B	361	-3.662	6.990	101.157	1.00	47.69
8974	CA	PHE	B	361	-3.859	6.826	102.586	1.00	48.63
8975	CB	PHE	B	361	-5.237	6.219	102.892	1.00	48.62
8976	CG	PHE	B	361	-6.400	7.123	102.573	1.00	49.54
8977	CD1	PHE	B	361	-7.191	7.635	103.592	1.00	49.80
8978	CE1	PHE	B	361	-8.276	8.459	103.306	1.00	50.81
8979	CZ	PHE	B	361	-8.580	8.775	101.993	1.00	50.87
8980	CE2	PHE	B	361	-7.799	8.264	100.965	1.00	50.72
8981	CD2	PHE	B	361	-6.719	7.439	101.259	1.00	49.46
8982	C	PHE	B	361	-2.836	5.907	103.210	1.00	49.27
8983	O	PHE	B	361	-2.396	4.934	102.607	1.00	48.69
8984	N	GLN	B	362	-2.490	6.222	104.448	1.00	50.41
8985	CA	GLN	B	362	-1.643	5.375	105.249	1.00	51.46
8986	CB	GLN	B	362	-0.577	6.206	105.952	1.00	51.57
8987	CG	GLN	B	362	0.828	5.671	105.793	1.00	54.18
8988	CD	GLN	B	362	1.518	6.183	104.530	1.00	56.47
8989	OE1	GLN	B	362	2.745	6.357	104.512	1.00	57.84
8990	NE2	GLN	B	362	0.740	6.420	103.478	1.00	54.93
8991	C	GLN	B	362	-2.634	4.828	106.247	1.00	51.84
8992	O	GLN	B	362	-3.385	5.587	106.855	1.00	51.72
8993	N	ILE	B	363	-2.656	3.515	106.408	1.00	52.75
8994	CA	ILE	B	363	-3.628	2.874	107.281	1.00	53.94
8995	CB	ILE	B	363	-3.340	1.358	107.355	1.00	53.90
8996	CG1	ILE	B	363	-4.581	0.564	106.966	1.00	54.08
8997	CD1	ILE	B	363	-4.854	0.624	105.495	1.00	53.92
8998	CG2	ILE	B	363	-2.799	0.943	108.702	1.00	53.69
8999	C	ILE	B	363	-3.723	3.488	108.684	1.00	55.21
9000	O	ILE	B	363	-4.779	3.426	109.317	1.00	55.01
9001	N	ASP	B	364	-2.626	4.094	109.151	1.00	56.58
9002	CA	ASP	B	364	-2.559	4.663	110.502	1.00	57.94
9003	CB	ASP	B	364	-1.217	4.311	111.183	1.00	58.15
9004	CG	ASP	B	364	-1.056	2.813	111.450	1.00	59.41
9005	OD1	ASP	B	364	-1.482	2.339	112.531	1.00	60.00
9006	OD2	ASP	B	364	-0.506	2.032	110.642	1.00	60.28
9007	C	ASP	B	364	-2.755	6.178	110.550	1.00	58.51
9008	O	ASP	B	364	-2.919	6.744	111.631	1.00	58.72
9009	N	LYS	B	365	-2.724	6.840	109.394	1.00	59.16
9010	CA	LYS	B	365	-2.862	8.299	109.349	1.00	59.70
9011	CB	LYS	B	365	-1.759	8.913	108.487	1.00	59.92
9012	CG	LYS	B	365	-0.397	9.007	109.174	1.00	62.07
9013	CD	LYS	B	365	-0.328	10.203	110.136	1.00	64.42
9014	CE	LYS	B	365	0.943	10.173	110.991	1.00	65.81
9015	NZ	LYS	B	365	1.022	11.341	111.931	1.00	66.10
9016	C	LYS	B	365	-4.228	8.788	108.854	1.00	59.90
9017	O	LYS	B	365	-4.772	8.291	107.858	1.00	59.90

FIGURE 3 FU

A	B	C	D	E	F	G	H	I	J
9018	N	LYS	B	366	-4.769	9.783	109.545	1.00	59.96
9019	CA	LYS	B	366	-6.048	10.358	109.164	1.00	59.95
9020	CB	LYS	B	366	-6.607	11.213	110.303	1.00	60.59
9021	CG	LYS	B	366	-7.629	12.266	109.865	1.00	62.10
9022	CD	LYS	B	366	-6.953	13.597	109.519	1.00	64.53
9023	CE	LYS	B	366	-6.364	14.256	110.756	1.00	65.27
9024	NZ	LYS	B	366	-5.765	15.580	110.433	1.00	66.91
9025	C	LYS	B	366	-5.900	11.200	107.910	1.00	59.37
9026	O	LYS	B	366	-6.807	11.275	107.080	1.00	59.74
9027	N	ASP	B	367	-4.752	11.842	107.770	1.00	58.44
9028	CA	ASP	B	367	-4.535	12.692	106.614	1.00	57.48
9029	CB	ASP	B	367	-3.555	13.824	106.935	1.00	58.05
9030	CG	ASP	B	367	-4.231	15.009	107.618	1.00	59.15
9031	OD1	ASP	B	367	-3.784	15.393	108.727	1.00	59.86
9032	OD2	ASP	B	367	-5.209	15.616	107.118	1.00	59.70
9033	C	ASP	B	367	-4.061	11.898	105.400	1.00	56.40
9034	O	ASP	B	367	-3.011	11.244	105.423	1.00	56.27
9035	N	CYS	B	368	-4.863	11.943	104.345	1.00	54.53
9036	CA	CYS	B	368	-4.486	11.319	103.103	1.00	52.77
9037	CB	CYS	B	368	-5.716	10.731	102.402	1.00	52.82
9038	SG	CYS	B	368	-6.823	11.959	101.664	1.00	51.25
9039	C	CYS	B	368	-3.892	12.434	102.268	1.00	51.66
9040	O	CYS	B	368	-4.100	13.609	102.567	1.00	51.26
9041	N	THR	B	369	-3.137	12.074	101.241	1.00	50.24
9042	CA	THR	B	369	-2.620	13.074	100.325	1.00	49.06
9043	CB	THR	B	369	-1.098	13.303	100.515	1.00	49.33
9044	OG1	THR	B	369	-0.448	13.415	99.240	1.00	48.47
9045	CG2	THR	B	369	-0.447	12.091	101.165	1.00	49.87
9046	C	THR	B	369	-3.000	12.708	98.894	1.00	48.47
9047	O	THR	B	369	-3.044	11.532	98.524	1.00	48.29
9048	N	PHE	B	370	-3.300	13.733	98.109	1.00	47.18
9049	CA	PHE	B	370	-3.771	13.572	96.754	1.00	46.08
9050	CB	PHE	B	370	-4.613	14.792	96.362	1.00	46.44
9051	CG	PHE	B	370	-5.991	14.800	96.976	1.00	47.55
9052	CD1	PHE	B	370	-7.072	14.236	96.298	1.00	48.39
9053	CE1	PHE	B	370	-8.344	14.241	96.860	1.00	49.07
9054	CZ	PHE	B	370	-8.538	14.810	98.115	1.00	49.41
9055	CE2	PHE	B	370	-7.465	15.375	98.792	1.00	47.58
9056	CD2	PHE	B	370	-6.207	15.364	98.225	1.00	46.62
9057	C	PHE	B	370	-2.639	13.430	95.769	1.00	45.28
9058	O	PHE	B	370	-1.699	14.227	95.770	1.00	45.61
9059	N	ILE	B	371	-2.733	12.440	94.895	1.00	43.59
9060	CA	ILE	B	371	-1.695	12.272	93.893	1.00	41.93
9061	CB	ILE	B	371	-1.279	10.801	93.805	1.00	42.22
9062	CG1	ILE	B	371	-2.310	9.971	93.032	1.00	42.14
9063	CD1	ILE	B	371	-1.929	8.470	92.932	1.00	39.82
9064	CG2	ILE	B	371	-1.126	10.253	95.214	1.00	40.79
9065	C	ILE	B	371	-2.106	12.876	92.553	1.00	40.92
9066	O	ILE	B	371	-1.269	13.061	91.657	1.00	40.67
9067	N	THR	B	372	-3.398	13.202	92.443	1.00	39.48
9068	CA	THR	B	372	-3.965	13.860	91.264	1.00	38.02

FIGURE 3 FV

A	B	C	D	E	F	G	H	I	J
9069	CB	THR	B	372	-4.930	12.909	90.508	1.00	38.39
9070	OG1	THR	B	372	-6.046	12.579	91.356	1.00	35.81
9071	CG2	THR	B	372	-4.244	11.564	90.227	1.00	36.59
9072	C	THR	B	372	-4.749	15.086	91.706	1.00	37.61
9073	O	THR	B	372	-5.222	15.155	92.834	1.00	37.09
9074	N	LYS	B	373	-4.937	16.030	90.799	1.00	37.10
9075	CA	LYS	B	373	-5.635	17.252	91.137	1.00	37.18
9076	CB	LYS	B	373	-4.728	18.190	91.964	1.00	37.58
9077	CG	LYS	B	373	-3.943	19.181	91.082	1.00	39.33
9078	CD	LYS	B	373	-3.308	20.349	91.870	1.00	43.81
9079	CE	LYS	B	373	-1.808	20.142	92.085	1.00	45.57
9080	NZ	LYS	B	373	-1.128	21.397	92.530	1.00	48.26
9081	C	LYS	B	373	-5.981	17.959	89.852	1.00	36.51
9082	O	LYS	B	373	-5.413	17.653	88.805	1.00	35.99
9083	N	GLY	B	374	-6.884	18.935	89.949	1.00	36.28
9084	CA	GLY	B	374	-7.294	19.723	88.808	1.00	36.50
9085	C	GLY	B	374	-8.799	19.722	88.614	1.00	36.62
9086	O	GLY	B	374	-9.537	19.005	89.301	1.00	35.95
9087	N	THR	B	375	-9.250	20.530	87.662	1.00	36.75
9088	CA	THR	B	375	-10.665	20.637	87.352	1.00	36.95
9089	CB	THR	B	375	-11.011	22.056	86.901	1.00	37.51
9090	OG1	THR	B	375	-10.248	22.382	85.736	1.00	38.55
9091	CG2	THR	B	375	-10.524	23.079	87.944	1.00	38.45
9092	C	THR	B	375	-11.106	19.615	86.302	1.00	36.41
9093	O	THR	B	375	-11.529	19.961	85.190	1.00	36.63
9094	N	TRP	B	376	-10.989	18.352	86.679	1.00	35.22
9095	CA	TRP	B	376	-11.459	17.236	85.889	1.00	34.47
9096	CB	TRP	B	376	-10.487	16.856	84.778	1.00	34.23
9097	CG	TRP	B	376	-9.065	16.821	85.198	1.00	34.19
9098	CD1	TRP	B	376	-8.170	17.864	85.178	1.00	33.41
9099	NE1	TRP	B	376	-6.949	17.445	85.650	1.00	33.46
9100	CE2	TRP	B	376	-7.030	16.122	85.986	1.00	32.59
9101	CD2	TRP	B	376	-8.357	15.696	85.708	1.00	32.41
9102	CE3	TRP	B	376	-8.702	14.365	85.963	1.00	29.42
9103	CZ3	TRP	B	376	-7.749	13.523	86.462	1.00	29.49
9104	CH2	TRP	B	376	-6.431	13.976	86.726	1.00	31.96
9105	CZ2	TRP	B	376	-6.058	15.266	86.488	1.00	30.16
9106	C	TRP	B	376	-11.535	16.185	86.958	1.00	34.44
9107	O	TRP	B	376	-11.211	16.483	88.104	1.00	33.98
9108	N	GLU	B	377	-11.994	14.979	86.641	1.00	34.14
9109	CA	GLU	B	377	-12.082	13.977	87.690	1.00	33.77
9110	CB	GLU	B	377	-13.526	13.797	88.152	1.00	34.05
9111	CG	GLU	B	377	-14.158	15.039	88.743	1.00	35.06
9112	CD	GLU	B	377	-15.413	14.728	89.525	1.00	35.00
9113	OE1	GLU	B	377	-15.679	15.462	90.487	1.00	36.61
9114	OE2	GLU	B	377	-16.121	13.753	89.190	1.00	33.99
9115	C	GLU	B	377	-11.518	12.624	87.319	1.00	33.35
9116	O	GLU	B	377	-11.294	12.327	86.150	1.00	33.34
9117	N	VAL	B	378	-11.316	11.812	88.351	1.00	32.77
9118	CA	VAL	B	378	-10.835	10.463	88.215	1.00	32.24
9119	CB	VAL	B	378	-9.905	10.082	89.378	1.00	32.21

FIGURE 3 FW

A	B	C	D	E	F	G	H	I	J
9120	CG1	VAL	B	378	-9.514	8.606	89.265	1.00	32.33
9121	CG2	VAL	B	378	-8.655	10.997	89.392	1.00	32.04
9122	C	VAL	B	378	-12.057	9.555	88.236	1.00	32.33
9123	O	VAL	B	378	-12.786	9.491	89.222	1.00	31.70
9124	N	ILE	B	379	-12.276	8.858	87.130	1.00	32.28
9125	CA	ILE	B	379	-13.425	7.996	86.973	1.00	31.43
9126	CB	ILE	B	379	-13.538	7.615	85.479	1.00	31.71
9127	CG1	ILE	B	379	-13.463	8.877	84.611	1.00	31.03
9128	CD1	ILE	B	379	-14.552	9.908	84.894	1.00	32.63
9129	CG2	ILE	B	379	-14.755	6.766	85.214	1.00	29.10
9130	C	ILE	B	379	-13.217	6.762	87.827	1.00	31.87
9131	O	ILE	B	379	-14.068	6.411	88.661	1.00	31.76
9132	N	GLY	B	380	-12.078	6.103	87.633	1.00	31.93
9133	CA	GLY	B	380	-11.779	4.922	88.418	1.00	33.11
9134	C	GLY	B	380	-10.320	4.533	88.511	1.00	33.83
9135	O	GLY	B	380	-9.510	4.874	87.664	1.00	34.19
9136	N	ILE	B	381	-9.979	3.808	89.565	1.00	34.81
9137	CA	ILE	B	381	-8.635	3.268	89.690	1.00	35.36
9138	CB	ILE	B	381	-8.191	3.255	91.143	1.00	35.26
9139	CG1	ILE	B	381	-7.923	4.694	91.613	1.00	35.36
9140	CD1	ILE	B	381	-7.818	4.864	93.143	1.00	33.27
9141	CG2	ILE	B	419	-6.952	2.379	91.275	1.00	36.08
9142	C	ILE	B	419	-8.661	1.854	89.122	1.00	35.57
9143	O	ILE	B	419	-9.324	0.978	89.662	1.00	35.74
9144	N	GLU	B	420	-7.929	1.646	88.036	1.00	36.13
9145	CA	GLU	B	420	-7.940	0.385	87.300	1.00	36.98
9146	CB	GLU	B	420	-7.780	0.670	85.802	1.00	37.12
9147	CG	GLU	B	420	-8.783	1.692	85.284	1.00	38.08
9148	CD	GLU	B	420	-10.204	1.374	85.714	1.00	39.72
9149	OE1	GLU	B	420	-10.645	0.217	85.552	1.00	41.76
9150	OE2	GLU	B	420	-10.881	2.275	86.235	1.00	41.40
9151	C	GLU	B	420	-6.918	-0.664	87.727	1.00	37.28
9152	O	GLU	B	420	-7.170	-1.853	87.580	1.00	37.66
9153	N	ALA	B	421	-5.766	-0.239	88.233	1.00	37.71
9154	CA	ALA	B	421	-4.754	-1.197	88.656	1.00	38.20
9155	CB	ALA	B	421	-4.275	-2.047	87.475	1.00	38.00
9156	C	ALA	B	421	-3.574	-0.537	89.359	1.00	38.59
9157	O	ALA	B	421	-3.209	0.615	89.100	1.00	39.16
9158	N	LEU	B	422	-2.948	-1.301	90.230	1.00	38.97
9159	CA	LEU	B	422	-1.912	-0.757	91.071	1.00	39.32
9160	CB	LEU	B	422	-2.474	-0.631	92.491	1.00	39.02
9161	CG	LEU	B	422	-1.928	0.375	93.520	1.00	38.78
9162	CD1	LEU	B	422	-0.764	1.182	93.029	1.00	36.84
9163	CD2	LEU	B	422	-1.610	-0.315	94.847	1.00	36.07
9164	C	LEU	B	422	-0.754	-1.726	91.120	1.00	39.56
9165	O	LEU	B	422	-0.951	-2.891	91.452	1.00	39.19
9166	N	THR	B	423	0.442	-1.258	90.772	1.00	39.91
9167	CA	THR	B	423	1.646	-2.050	91.019	1.00	40.60
9168	CB	THR	B	423	2.463	-2.312	89.756	1.00	40.20
9169	OG1	THR	B	423	2.864	-1.060	89.193	1.00	40.20
9170	CG2	THR	B	423	1.622	-2.960	88.685	1.00	40.73



**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 FX**

A	B	C	D	E	F	G	H	I	J
9171	C	THR	B	385	2.499	-1.252	91.994	1.00	41.37
9172	O	THR	B	385	2.147	-0.128	92.362	1.00	41.22
9173	N	SER	B	386	3.641	-1.821	92.374	1.00	42.02
9174	CA	SER	B	386	4.524	-1.206	93.350	1.00	42.34
9175	CB	SER	B	386	5.639	-2.181	93.739	1.00	42.96
9176	OG	SER	B	386	6.026	-2.983	92.630	1.00	44.13
9177	C	SER	B	386	5.107	0.094	92.849	1.00	42.48
9178	O	SER	B	386	5.543	0.923	93.646	1.00	42.77
9179	N	ASP	B	387	5.099	0.285	91.532	1.00	42.54
9180	CA	ASP	B	387	5.655	1.497	90.940	1.00	42.32
9181	CB	ASP	B	387	6.782	1.137	89.976	1.00	42.67
9182	CG	ASP	B	387	7.871	0.327	90.651	1.00	43.48
9183	OD1	ASP	B	387	8.732	0.932	91.321	1.00	44.23
9184	OD2	ASP	B	387	7.924	-0.918	90.599	1.00	45.16
9185	C	ASP	B	387	4.619	2.352	90.227	1.00	42.29
9186	O	ASP	B	387	4.841	3.543	89.988	1.00	42.49
9187	N	TYR	B	388	3.481	1.754	89.893	1.00	41.64
9188	CA	TYR	B	388	2.468	2.488	89.153	1.00	40.99
9189	CB	TYR	B	388	2.595	2.189	87.661	1.00	41.59
9190	CG	TYR	B	388	3.849	2.764	87.044	1.00	42.34
9191	CD1	TYR	B	388	4.858	1.939	86.558	1.00	42.79
9192	CE1	TYR	B	388	6.006	2.468	85.987	1.00	44.62
9193	CZ	TYR	B	388	6.159	3.845	85.910	1.00	46.09
9194	OH	TYR	B	388	7.287	4.403	85.352	1.00	48.13
9195	CE2	TYR	B	388	5.170	4.680	86.380	1.00	46.23
9196	CD2	TYR	B	388	4.018	4.133	86.945	1.00	45.16
9197	C	TYR	B	388	1.024	2.288	89.616	1.00	39.94
9198	O	TYR	B	388	0.648	1.252	90.157	1.00	39.85
9199	N	LEU	B	389	0.237	3.331	89.408	1.00	39.01
9200	CA	LEU	B	389	-1.186	3.335	89.689	1.00	37.62
9201	CB	LEU	B	389	-1.499	4.401	90.724	1.00	37.52
9202	CG	LEU	B	389	-2.940	4.749	91.121	1.00	37.00
9203	CD1	LEU	B	389	-3.837	4.911	89.923	1.00	35.57
9204	CD2	LEU	B	389	-3.503	3.738	92.076	1.00	36.02
9205	C	LEU	B	389	-1.815	3.701	88.360	1.00	36.86
9206	O	LEU	B	389	-1.472	4.733	87.779	1.00	36.59
9207	N	TYR	B	390	-2.698	2.845	87.849	1.00	35.64
9208	CA	TYR	B	390	-3.348	3.139	86.585	1.00	34.51
9209	CB	TYR	B	390	-3.358	1.918	85.672	1.00	34.68
9210	CG	TYR	B	390	-1.998	1.432	85.283	1.00	35.76
9211	CD1	TYR	B	390	-1.472	1.725	84.043	1.00	35.57
9212	CE1	TYR	B	390	-0.231	1.290	83.690	1.00	38.07
9213	CZ	TYR	B	390	0.505	0.535	84.575	1.00	37.51
9214	OH	TYR	B	390	1.747	0.089	84.205	1.00	40.72
9215	CE2	TYR	B	390	0.011	0.234	85.816	1.00	36.63
9216	CD2	TYR	B	390	-1.231	0.680	86.165	1.00	36.53
9217	C	TYR	B	390	-4.774	3.597	86.823	1.00	33.58
9218	O	TYR	B	390	-5.513	3.013	87.602	1.00	32.85
9219	N	TYR	B	391	-5.186	4.626	86.112	1.00	32.64
9220	CA	TYR	B	391	-6.520	5.104	86.333	1.00	32.08
9221	CB	TYR	B	391	-6.524	6.142	87.460	1.00	31.85

FIGURE 3 FY

A	B	C	D	E	F	G	H	I	J
9222	CG	TYR	B	391	-5.809	7.414	87.109	1.00	32.71
9223	CD1	TYR	B	391	-6.491	8.465	86.496	1.00	34.03
9224	CE1	TYR	B	391	-5.853	9.642	86.183	1.00	35.77
9225	CZ	TYR	B	391	-4.510	9.789	86.475	1.00	35.74
9226	OH	TYR	B	391	-3.879	10.974	86.145	1.00	37.71
9227	CE2	TYR	B	391	-3.810	8.762	87.064	1.00	34.02
9228	CD2	TYR	B	391	-4.461	7.576	87.384	1.00	32.38
9229	C	TYR	B	391	-7.104	5.665	85.066	1.00	31.15
9230	O	TYR	B	391	-6.387	5.894	84.094	1.00	30.75
9231	N	ILE	B	392	-8.419	5.869	85.085	1.00	30.53
9232	CA	ILE	B	392	-9.120	6.464	83.951	1.00	29.73
9233	CB	ILE	B	392	-10.341	5.621	83.588	1.00	29.87
9234	CG1	ILE	B	392	-9.924	4.221	83.109	1.00	29.10
9235	CD1	ILE	B	392	-9.997	4.037	81.626	1.00	28.29
9236	CG2	ILE	B	392	-11.199	6.372	82.574	1.00	29.17
9237	C	ILE	B	392	-9.615	7.840	84.375	1.00	29.55
9238	O	ILE	B	392	-10.098	8.012	85.496	1.00	29.03
9239	N	SER	B	393	-9.528	8.817	83.489	1.00	29.09
9240	CA	SER	B	393	-9.995	10.120	83.869	1.00	30.52
9241	CB	SER	B	393	-8.868	10.916	84.529	1.00	30.15
9242	OG	SER	B	393	-8.127	11.567	83.519	1.00	30.36
9243	C	SER	B	393	-10.501	10.873	82.660	1.00	31.45
9244	O	SER	B	393	-10.301	10.464	81.525	1.00	31.45
9245	N	ASN	B	394	-11.166	11.986	82.910	1.00	32.96
9246	CA	ASN	B	394	-11.640	12.805	81.819	1.00	34.79
9247	CB	ASN	B	394	-13.131	13.121	81.993	1.00	34.52
9248	CG	ASN	B	394	-13.448	13.719	83.359	1.00	35.56
9249	OD1	ASN	B	394	-12.543	14.092	84.109	1.00	37.73
9250	ND2	ASN	B	394	-14.729	13.823	83.682	1.00	35.03
9251	C	ASN	B	394	-10.806	14.084	81.735	1.00	36.01
9252	O	ASN	B	394	-11.332	15.149	81.449	1.00	36.25
9253	N	GLU	B	395	-9.502	13.984	81.995	1.00	37.46
9254	CA	GLU	B	395	-8.661	15.170	81.909	1.00	38.43
9255	CB	GLU	B	395	-7.333	15.003	82.657	1.00	38.65
9256	CG	GLU	B	395	-6.412	16.203	82.463	1.00	40.19
9257	CD	GLU	B	395	-5.069	16.107	83.176	1.00	42.90
9258	OE1	GLU	B	395	-4.430	17.176	83.354	1.00	44.92
9259	OE2	GLU	B	395	-4.634	14.997	83.551	1.00	41.19
9260	C	GLU	B	395	-8.402	15.547	80.462	1.00	38.83
9261	O	GLU	B	395	-8.514	16.707	80.084	1.00	39.14
9262	N	TYR	B	396	-8.061	14.575	79.633	1.00	39.51
9263	CA	TYR	B	396	-7.753	14.923	78.257	1.00	40.26
9264	CB	TYR	B	396	-7.789	13.723	77.316	1.00	40.51
9265	CG	TYR	B	396	-7.015	14.016	76.048	1.00	41.76
9266	CD1	TYR	B	396	-7.560	13.779	74.793	1.00	43.07
9267	CE1	TYR	B	396	-6.844	14.055	73.640	1.00	43.54
9268	CZ	TYR	B	396	-5.574	14.593	73.737	1.00	45.08
9269	OH	TYR	B	396	-4.845	14.882	72.598	1.00	47.21
9270	CE2	TYR	B	396	-5.014	14.838	74.971	1.00	43.68
9271	CD2	TYR	B	396	-5.732	14.549	76.115	1.00	42.90
9272	C	TYR	B	396	-8.668	15.992	77.697	1.00	40.44

FIGURE 3 FZ

A	B	C	D	E	F	G	H	I	J
9273	O	TYR	B	396	-9.867	15.759	77.530	1.00	40.96
9274	N	LYS	B	397	-8.080	17.150	77.398	1.00	40.48
9275	CA	LYS	B	397	-8.744	18.277	76.728	1.00	39.95
9276	CB	LYS	B	397	-9.266	17.862	75.356	1.00	40.33
9277	CG	LYS	B	397	-8.177	17.582	74.339	1.00	42.20
9278	CD	LYS	B	397	-8.772	16.975	73.082	1.00	45.22
9279	CE	LYS	B	397	-7.754	16.878	71.950	1.00	47.51
9280	NZ	LYS	B	397	-8.449	16.664	70.631	1.00	48.01
9281	C	LYS	B	397	-9.861	18.932	77.500	1.00	39.35
9282	O	LYS	B	397	-10.658	19.672	76.927	1.00	38.89
9283	N	GLY	B	398	-9.918	18.678	78.800	1.00	38.74
9284	CA	GLY	B	398	-10.986	19.241	79.604	1.00	38.23
9285	C	GLY	B	398	-12.361	18.833	79.094	1.00	37.91
9286	O	GLY	B	398	-13.316	19.605	79.202	1.00	38.46
9287	N	MET	B	399	-12.464	17.639	78.510	1.00	36.88
9288	CA	MET	B	399	-13.754	17.115	78.037	1.00	36.07
9289	CB	MET	B	399	-13.597	16.470	76.680	1.00	36.62
9290	CG	MET	B	399	-13.082	17.399	75.632	1.00	38.67
9291	SD	MET	B	399	-12.656	16.504	74.157	1.00	45.06
9292	CE	MET	B	399	-14.281	16.188	73.424	1.00	42.92
9293	C	MET	B	399	-14.266	16.076	79.018	1.00	34.89
9294	O	MET	B	399	-13.810	14.937	79.012	1.00	34.49
9295	N	PRO	B	400	-15.220	16.470	79.852	1.00	33.87
9296	CA	PRO	B	400	-15.733	15.620	80.938	1.00	33.31
9297	CB	PRO	B	400	-16.821	16.487	81.579	1.00	33.52
9298	CG	PRO	B	400	-16.546	17.877	81.129	1.00	33.75
9299	CD	PRO	B	400	-15.900	17.772	79.781	1.00	33.90
9300	C	PRO	B	400	-16.362	14.310	80.463	1.00	33.03
9301	O	PRO	B	400	-16.481	13.367	81.239	1.00	32.45
9302	N	GLY	B	401	-16.788	14.272	79.209	1.00	32.82
9303	CA	GLY	B	401	-17.378	13.077	78.644	1.00	33.58
9304	C	GLY	B	401	-16.364	12.345	77.791	1.00	33.84
9305	O	GLY	B	401	-16.715	11.575	76.891	1.00	33.48
9306	N	GLY	B	402	-15.089	12.601	78.062	1.00	33.60
9307	CA	GLY	B	402	-14.025	11.926	77.345	1.00	33.73
9308	C	GLY	B	402	-13.471	10.992	78.383	1.00	34.35
9309	O	GLY	B	402	-13.734	11.168	79.573	1.00	34.65
9310	N	ARG	B	403	-12.684	10.019	77.963	1.00	34.43
9311	CA	ARG	B	403	-12.236	8.996	78.886	1.00	34.51
9312	CB	ARG	B	403	-13.301	7.889	78.914	1.00	34.75
9313	CG	ARG	B	403	-14.006	7.629	80.231	1.00	36.23
9314	CD	ARG	B	403	-14.361	8.847	81.041	1.00	38.13
9315	NE	ARG	B	403	-15.671	8.737	81.693	1.00	38.92
9316	CZ	ARG	B	403	-16.562	9.728	81.708	1.00	39.23
9317	NH1	ARG	B	403	-17.729	9.578	82.317	1.00	38.64
9318	NH2	ARG	B	403	-16.282	10.878	81.099	1.00	37.76
9319	C	ARG	B	403	-10.919	8.434	78.353	1.00	34.08
9320	O	ARG	B	403	-10.853	8.032	77.198	1.00	33.75
9321	N	ASN	B	404	-9.876	8.432	79.185	1.00	34.22
9322	CA	ASN	B	404	-8.551	7.927	78.790	1.00	33.84
9323	CB	ASN	B	404	-7.671	9.057	78.262	1.00	33.63

FIGURE 3 GA

A	B	C	D	E	F	G	H	I	J
9324	CG	ASN	B	404	-8.034	9.472	76.878	1.00	33.22
9325	OD1	ASN	B	404	-8.649	10.515	76.686	1.00	33.41
9326	ND2	ASN	B	404	-7.662	8.659	75.889	1.00	32.71
9327	C	ASN	B	404	-7.822	7.263	79.951	1.00	33.53
9328	O	ASN	B	404	-8.082	7.581	81.097	1.00	32.56
9329	N	LEU	B	405	-6.912	6.341	79.635	1.00	33.69
9330	CA	LEU	B	405	-6.123	5.631	80.641	1.00	33.92
9331	CB	LEU	B	405	-5.784	4.245	80.117	1.00	33.85
9332	CG	LEU	B	405	-4.928	3.321	80.968	1.00	34.67
9333	CD1	LEU	B	405	-5.558	3.125	82.345	1.00	34.97
9334	CD2	LEU	B	405	-4.747	2.000	80.249	1.00	34.55
9335	C	LEU	B	405	-4.825	6.397	80.967	1.00	34.30
9336	O	LEU	B	405	-4.103	6.824	80.073	1.00	33.84
9337	N	TYR	B	406	-4.548	6.594	82.249	1.00	35.07
9338	CA	TYR	B	406	-3.324	7.281	82.656	1.00	35.88
9339	CB	TYR	B	406	-3.607	8.618	83.337	1.00	35.36
9340	CG	TYR	B	406	-4.211	9.656	82.428	1.00	35.76
9341	CD1	TYR	B	406	-3.443	10.691	81.932	1.00	35.18
9342	CE1	TYR	B	406	-3.994	11.654	81.101	1.00	37.36
9343	CZ	TYR	B	406	-5.336	11.577	80.770	1.00	36.65
9344	OH	TYR	B	406	-5.870	12.530	79.941	1.00	39.75
9345	CE2	TYR	B	406	-6.126	10.555	81.252	1.00	34.01
9346	CD2	TYR	B	406	-5.573	9.606	82.075	1.00	33.96
9347	C	TYR	B	406	-2.522	6.427	83.603	1.00	36.60
9348	O	TYR	B	406	-3.066	5.575	84.321	1.00	36.45
9349	N	LYS	B	407	-1.222	6.692	83.615	1.00	37.42
9350	CA	LYS	B	407	-0.297	5.990	84.484	1.00	38.56
9351	CB	LYS	B	407	0.597	5.082	83.633	1.00	38.56
9352	CG	LYS	B	407	1.995	4.805	84.154	1.00	38.49
9353	CD	LYS	B	407	2.579	3.634	83.370	1.00	38.76
9354	CE	LYS	B	407	4.038	3.832	82.997	1.00	39.60
9355	NZ	LYS	B	407	4.362	3.057	81.748	1.00	39.08
9356	C	LYS	B	407	0.519	6.999	85.294	1.00	38.99
9357	O	LYS	B	407	1.195	7.867	84.733	1.00	39.39
9358	N	ILE	B	408	0.430	6.889	86.614	1.00	39.35
9359	CA	ILE	B	408	1.155	7.776	87.511	1.00	39.42
9360	CB	ILE	B	408	0.161	8.552	88.403	1.00	39.46
9361	CG1	ILE	B	408	0.914	9.500	89.347	1.00	40.00
9362	CD1	ILE	B	408	0.022	10.521	90.018	1.00	39.47
9363	CG2	ILE	B	408	-0.733	7.591	89.194	1.00	37.63
9364	C	ILE	B	408	2.175	7.018	88.368	1.00	39.81
9365	O	ILE	B	408	1.853	6.018	89.016	1.00	39.29
9366	N	GLN	B	409	3.412	7.508	88.353	1.00	40.51
9367	CA	GLN	B	409	4.507	6.923	89.129	1.00	40.64
9368	CB	GLN	B	409	5.841	7.512	88.649	1.00	40.42
9369	CG	GLN	B	409	7.090	6.901	89.267	1.00	41.41
9370	CD	GLN	B	409	8.361	7.664	88.884	1.00	41.94
9371	OE1	GLN	B	409	8.638	7.861	87.707	1.00	43.52
9372	NE2	GLN	B	409	9.117	8.096	89.878	1.00	39.59
9373	C	GLN	B	409	4.290	7.215	90.608	1.00	40.92
9374	O	GLN	B	409	4.192	8.379	91.003	1.00	41.00

FIGURE 3 GB

A	B	C	D	E	F	G	H	I	J
9375	N	LEU	B	410	4.193	6.163	91.418	1.00	41.42
9376	CA	LEU	B	410	3.981	6.300	92.857	1.00	42.64
9377	CB	LEU	B	410	3.837	4.924	93.508	1.00	42.69
9378	CG	LEU	B	410	2.492	4.197	93.447	1.00	43.09
9379	CD1	LEU	B	410	1.736	4.560	92.189	1.00	42.37
9380	CD2	LEU	B	410	2.721	2.707	93.530	1.00	42.61
9381	C	LEU	B	410	5.092	7.041	93.599	1.00	43.77
9382	O	LEU	B	410	4.931	7.370	94.777	1.00	44.22
9383	N	SER	B	411	6.220	7.282	92.936	1.00	44.48
9384	CA	SER	B	411	7.336	7.946	93.592	1.00	45.35
9385	CB	SER	B	411	8.661	7.209	93.324	1.00	45.03
9386	OG	SER	B	411	9.035	7.308	91.961	1.00	43.76
9387	C	SER	B	411	7.429	9.396	93.156	1.00	46.24
9388	O	SER	B	411	8.186	10.182	93.738	1.00	46.61
9389	N	ASP	B	412	6.659	9.760	92.137	1.00	46.78
9390	CA	ASP	B	412	6.678	11.143	91.665	1.00	47.56
9391	CB	ASP	B	412	7.915	11.407	90.801	1.00	47.90
9392	CG	ASP	B	412	8.105	12.876	90.501	1.00	50.22
9393	OD1	ASP	B	412	8.902	13.203	89.592	1.00	53.28
9394	OD2	ASP	B	412	7.502	13.781	91.124	1.00	51.81
9395	C	ASP	B	412	5.384	11.530	90.933	1.00	47.35
9396	O	ASP	B	412	5.277	11.438	89.706	1.00	47.12
9397	N	TYR	B	413	4.420	11.979	91.730	1.00	47.17
9398	CA	TYR	B	413	3.089	12.378	91.294	1.00	46.56
9399	CB	TYR	B	413	2.360	13.009	92.477	1.00	45.92
9400	CG	TYR	B	413	2.276	12.066	93.659	1.00	43.46
9401	CD1	TYR	B	413	2.309	10.697	93.462	1.00	40.02
9402	CE1	TYR	B	413	2.214	9.818	94.514	1.00	39.75
9403	CZ	TYR	B	413	2.108	10.288	95.793	1.00	38.66
9404	OH	TYR	B	413	2.025	9.382	96.805	1.00	39.90
9405	CE2	TYR	B	413	2.085	11.637	96.042	1.00	40.62
9406	CD2	TYR	B	413	2.162	12.535	94.964	1.00	41.96
9407	C	TYR	B	413	3.144	13.343	90.134	1.00	47.27
9408	O	TYR	B	413	2.156	13.554	89.436	1.00	47.56
9409	N	THR	B	414	4.315	13.918	89.915	1.00	47.67
9410	CA	THR	B	414	4.484	14.850	88.824	1.00	48.13
9411	CB	THR	B	414	5.683	15.764	89.103	1.00	48.45
9412	OG1	THR	B	414	6.839	14.958	89.386	1.00	48.02
9413	CG2	THR	B	414	5.463	16.548	90.399	1.00	49.00
9414	C	THR	B	414	4.715	14.059	87.549	1.00	48.31
9415	O	THR	B	414	4.715	14.614	86.451	1.00	48.30
9416	N	LYS	B	415	4.932	12.760	87.696	1.00	48.57
9417	CA	LYS	B	415	5.173	11.919	86.536	1.00	49.01
9418	CB	LYS	B	415	6.399	11.024	86.740	1.00	49.32
9419	CG	LYS	B	415	7.717	11.805	86.908	1.00	51.05
9420	CD	LYS	B	415	8.860	11.204	86.085	1.00	54.34
9421	CE	LYS	B	415	8.896	11.775	84.661	1.00	57.13
9422	NZ	LYS	B	415	9.791	11.003	83.720	1.00	58.80
9423	C	LYS	B	415	3.937	11.103	86.202	1.00	48.84
9424	O	LYS	B	415	3.742	9.991	86.705	1.00	49.14
9425	N	VAL	B	416	3.092	11.682	85.361	1.00	48.53

FIGURE 3 GC

A	B	C	D	E	F	G	H	I	J
9426	CA	VAL	B	416	1.879	11.024	84.907	1.00	48.03
9427	CB	VAL	B	416	0.631	11.859	85.237	1.00	47.91
9428	CG1	VAL	B	416	-0.630	11.172	84.714	1.00	47.97
9429	CG2	VAL	B	416	0.519	12.079	86.717	1.00	48.17
9430	C	VAL	B	416	1.936	10.869	83.398	1.00	47.87
9431	O	VAL	B	416	2.175	11.844	82.682	1.00	47.53
9432	N	THR	B	417	1.703	9.650	82.915	1.00	47.45
9433	CA	THR	B	417	1.698	9.403	81.478	1.00	47.54
9434	CB	THR	B	417	2.700	8.274	81.121	1.00	47.46
9435	OG1	THR	B	417	4.026	8.632	81.546	1.00	48.55
9436	CG2	THR	B	417	2.832	8.139	79.619	1.00	47.28
9437	C	THR	B	417	0.306	8.999	81.006	1.00	47.33
9438	O	THR	B	417	-0.344	8.159	81.624	1.00	47.27
9439	N	CYS	B	418	-0.168	9.596	79.920	1.00	47.47
9440	CA	CYS	B	418	-1.438	9.141	79.363	1.00	47.29
9441	CB	CYS	B	418	-2.240	10.250	78.697	1.00	47.44
9442	SG	CYS	B	418	-3.920	9.687	78.237	1.00	47.35
9443	C	CYS	B	418	-1.164	8.056	78.356	1.00	47.04
9444	O	CYS	B	418	-0.508	8.293	77.345	1.00	47.45
9445	N	LEU	B	419	-1.685	6.868	78.631	1.00	46.68
9446	CA	LEU	B	419	-1.483	5.706	77.771	1.00	46.41
9447	CB	LEU	B	419	-1.611	4.441	78.609	1.00	46.32
9448	CG	LEU	B	419	-0.833	4.462	79.918	1.00	46.29
9449	CD1	LEU	B	419	-1.130	3.222	80.736	1.00	46.26
9450	CD2	LEU	B	419	0.653	4.575	79.610	1.00	46.66
9451	C	LEU	B	419	-2.424	5.578	76.571	1.00	46.43
9452	O	LEU	B	419	-2.205	4.728	75.709	1.00	46.90
9453	N	SER	B	420	-3.472	6.388	76.495	1.00	46.32
9454	CA	SER	B	420	-4.432	6.219	75.395	1.00	46.23
9455	CB	SER	B	420	-5.740	5.617	75.915	1.00	45.90
9456	OG	SER	B	420	-6.426	6.523	76.755	1.00	45.99
9457	C	SER	B	420	-4.740	7.475	74.611	1.00	46.02
9458	O	SER	B	420	-5.144	7.405	73.452	1.00	46.35
9459	N	CYS	B	421	-4.536	8.621	75.240	1.00	46.04
9460	CA	CYS	B	421	-4.882	9.905	74.644	1.00	46.50
9461	CB	CYS	B	421	-4.250	11.057	75.440	1.00	46.49
9462	SG	CYS	B	421	-4.787	11.169	77.167	1.00	47.72
9463	C	CYS	B	421	-4.522	10.062	73.173	1.00	46.81
9464	O	CYS	B	421	-5.298	10.615	72.401	1.00	46.67
9465	N	GLU	B	422	-3.347	9.581	72.786	1.00	47.35
9466	CA	GLU	B	422	-2.831	9.850	71.446	1.00	47.86
9467	CB	GLU	B	422	-1.472	10.570	71.544	1.00	47.88
9468	CG	GLU	B	422	-1.433	11.997	71.002	1.00	50.00
9469	CD	GLU	B	422	-2.245	13.011	71.808	1.00	53.03
9470	OE1	GLU	B	422	-2.082	13.091	73.046	1.00	53.34
9471	OE2	GLU	B	422	-3.043	13.757	71.189	1.00	54.03
9472	C	GLU	B	422	-2.736	8.640	70.517	1.00	47.69
9473	O	GLU	B	422	-2.197	8.749	69.421	1.00	47.87
9474	N	LEU	B	423	-3.274	7.501	70.938	1.00	47.64
9475	CA	LEU	B	423	-3.241	6.288	70.113	1.00	47.92
9476	CB	LEU	B	423	-3.915	5.128	70.841	1.00	47.08

FIGURE 3 GD

A	B	C	D	E	F	G	H	I	J
9477	CG	LEU	B	423	-3.146	4.584	72.043	1.00	47.38
9478	CD1	LEU	B	423	-3.918	3.471	72.729	1.00	46.19
9479	CD2	LEU	B	423	-1.744	4.100	71.638	1.00	46.08
9480	C	LEU	B	423	-3.904	6.492	68.748	1.00	48.36
9481	O	LEU	B	423	-3.318	6.187	67.705	1.00	48.49
9482	N	ASN	B	424	-5.134	6.999	68.782	1.00	48.71
9483	CA	ASN	B	424	-5.939	7.302	67.608	1.00	49.05
9484	CB	ASN	B	424	-6.833	6.108	67.237	1.00	49.54
9485	CG	ASN	B	424	-6.105	4.995	66.455	1.00	51.63
9486	OD1	ASN	B	424	-5.835	5.123	65.252	1.00	53.95
9487	ND2	ASN	B	424	-5.848	3.871	67.129	1.00	52.35
9488	C	ASN	B	424	-6.854	8.459	68.025	1.00	48.74
9489	O	ASN	B	424	-8.043	8.254	68.251	1.00	49.07
9490	N	PRO	B	425	-6.302	9.660	68.164	1.00	48.43
9491	CA	PRO	B	425	-7.054	10.847	68.617	1.00	48.02
9492	CB	PRO	B	425	-6.050	11.989	68.404	1.00	47.86
9493	CG	PRO	B	425	-5.023	11.403	67.490	1.00	48.40
9494	CD	PRO	B	425	-4.879	9.982	67.959	1.00	48.45
9495	C	PRO	B	425	-8.381	11.199	67.918	1.00	47.59
9496	O	PRO	B	425	-9.222	11.842	68.540	1.00	46.93
9497	N	GLU	B	426	-8.561	10.827	66.660	1.00	47.18
9498	CA	GLU	B	426	-9.802	11.166	65.971	1.00	46.96
9499	CB	GLU	B	426	-9.535	11.492	64.501	1.00	47.53
9500	CG	GLU	B	426	-8.931	12.870	64.268	1.00	50.42
9501	CD	GLU	B	426	-8.861	13.226	62.797	1.00	55.18
9502	OE1	GLU	B	426	-9.438	12.456	61.982	1.00	58.05
9503	OE2	GLU	B	426	-8.235	14.264	62.451	1.00	55.78
9504	C	GLU	B	426	-10.844	10.055	66.088	1.00	45.85
9505	O	GLU	B	426	-12.048	10.310	66.056	1.00	46.07
9506	N	ARG	B	427	-10.372	8.824	66.218	1.00	44.60
9507	CA	ARG	B	427	-11.245	7.669	66.346	1.00	43.20
9508	CB	ARG	B	427	-10.545	6.432	65.742	1.00	43.19
9509	CG	ARG	B	427	-11.100	5.047	66.136	1.00	42.79
9510	CD	ARG	B	427	-11.837	4.273	65.033	1.00	42.22
9511	NE	ARG	B	427	-10.961	3.411	64.240	1.00	43.75
9512	CZ	ARG	B	427	-11.117	2.095	64.123	1.00	43.04
9513	NH1	ARG	B	427	-10.278	1.382	63.381	1.00	41.93
9514	NH2	ARG	B	427	-12.111	1.484	64.752	1.00	42.41
9515	C	ARG	B	427	-11.555	7.448	67.825	1.00	42.54
9516	O	ARG	B	427	-12.665	7.066	68.198	1.00	41.81
9517	N	CYS	B	428	-10.578	7.736	68.678	1.00	41.68
9518	CA	CYS	B	428	-10.702	7.308	70.059	1.00	40.78
9519	CB	CYS	B	428	-9.771	6.114	70.280	1.00	40.84
9520	SG	CYS	B	428	-10.305	4.676	69.310	1.00	40.30
9521	C	CYS	B	428	-10.513	8.331	71.156	1.00	40.51
9522	O	CYS	B	428	-9.447	8.941	71.285	1.00	40.62
9523	N	GLN	B	429	-11.566	8.524	71.945	1.00	39.36
9524	CA	GLN	B	429	-11.482	9.414	73.078	1.00	38.88
9525	CB	GLN	B	429	-11.630	10.883	72.658	1.00	39.13
9526	CG	GLN	B	429	-12.909	11.232	71.952	1.00	41.45
9527	CD	GLN	B	429	-12.815	12.506	71.135	1.00	42.09

FIGURE 3 GE

A	B	C	D	E	F	G	H	I	J
9528	OE1	GLN	B	429	-12.231	12.518	70.052	1.00	42.86
9529	NE2	GLN	B	429	-13.410	13.571	71.637	1.00	43.57
9530	C	GLN	B	429	-12.407	9.030	74.230	1.00	38.04
9531	O	GLN	B	429	-12.768	9.873	75.025	1.00	38.38
9532	N	TYR	B	430	-12.775	7.747	74.301	1.00	36.73
9533	CA	TYR	B	430	-13.530	7.164	75.421	1.00	35.62
9534	CB	TYR	B	430	-15.036	7.101	75.130	1.00	35.47
9535	CG	TYR	B	430	-15.935	6.976	76.345	1.00	33.00
9536	CD1	TYR	B	430	-16.190	5.741	76.928	1.00	30.65
9537	CE1	TYR	B	430	-17.013	5.634	78.036	1.00	31.86
9538	CZ	TYR	B	430	-17.612	6.776	78.569	1.00	32.82
9539	OH	TYR	B	430	-18.456	6.680	79.661	1.00	32.17
9540	CE2	TYR	B	430	-17.380	8.009	77.996	1.00	31.47
9541	CD2	TYR	B	430	-16.546	8.103	76.898	1.00	32.86
9542	C	TYR	B	430	-13.000	5.747	75.573	1.00	35.39
9543	O	TYR	B	430	-13.337	4.876	74.766	1.00	36.02
9544	N	TYR	B	431	-12.178	5.514	76.595	1.00	34.48
9545	CA	TYR	B	431	-11.521	4.228	76.768	1.00	33.97
9546	CB	TYR	B	431	-9.993	4.411	76.819	1.00	34.10
9547	CG	TYR	B	431	-9.288	4.635	75.502	1.00	33.35
9548	CD1	TYR	B	431	-8.782	3.568	74.780	1.00	33.82
9549	CE1	TYR	B	431	-8.126	3.764	73.577	1.00	32.81
9550	CZ	TYR	B	431	-7.975	5.024	73.089	1.00	32.09
9551	OH	TYR	B	431	-7.317	5.210	71.884	1.00	34.18
9552	CE2	TYR	B	431	-8.474	6.106	73.790	1.00	32.54
9553	CD2	TYR	B	431	-9.109	5.909	74.994	1.00	31.95
9554	C	TYR	B	431	-11.893	3.521	78.054	1.00	33.98
9555	O	TYR	B	431	-12.132	4.149	79.085	1.00	33.82
9556	N	SER	B	432	-11.916	2.201	77.992	1.00	33.64
9557	CA	SER	B	432	-11.991	1.400	79.197	1.00	33.67
9558	CB	SER	B	432	-13.336	0.693	79.344	1.00	33.69
9559	OG	SER	B	432	-13.557	-0.209	78.285	1.00	35.22
9560	C	SER	B	432	-10.831	0.417	79.082	1.00	33.30
9561	O	SER	B	432	-10.242	0.260	78.000	1.00	32.90
9562	N	VAL	B	433	-10.493	-0.252	80.171	1.00	33.35
9563	CA	VAL	B	433	-9.318	-1.105	80.138	1.00	33.52
9564	CB	VAL	B	433	-8.066	-0.355	80.689	1.00	33.67
9565	CG1	VAL	B	433	-8.301	0.133	82.113	1.00	31.86
9566	CG2	VAL	B	433	-6.806	-1.245	80.621	1.00	33.10
9567	C	VAL	B	433	-9.482	-2.396	80.898	1.00	34.40
9568	O	VAL	B	433	-10.216	-2.469	81.876	1.00	34.34
9569	N	SER	B	434	-8.792	-3.429	80.434	1.00	35.52
9570	CA	SER	B	434	-8.774	-4.692	81.155	1.00	36.83
9571	CB	SER	B	434	-9.631	-5.760	80.476	1.00	36.32
9572	OG	SER	B	434	-9.797	-6.868	81.354	1.00	36.59
9573	C	SER	B	434	-7.340	-5.180	81.297	1.00	37.75
9574	O	SER	B	434	-6.682	-5.530	80.307	1.00	37.42
9575	N	PHE	B	435	-6.874	-5.205	82.541	1.00	39.26
9576	CA	PHE	B	435	-5.519	-5.633	82.862	1.00	40.71
9577	CB	PHE	B	435	-4.987	-4.889	84.093	1.00	40.80
9578	CG	PHE	B	435	-4.566	-3.480	83.812	1.00	41.50



FIGURE 3 GF

A	B	C	D	E	F	G	H	I	J
9579	CD1	PHE	B	435	-5.471	-2.434	83.929	1.00	41.05
9580	CE1	PHE	B	435	-5.087	-1.145	83.671	1.00	40.57
9581	CZ	PHE	B	435	-3.800	-0.870	83.289	1.00	41.39
9582	CE2	PHE	B	435	-2.883	-1.889	83.177	1.00	42.17
9583	CD2	PHE	B	435	-3.273	-3.197	83.434	1.00	41.94
9584	C	PHE	B	435	-5.458	-7.119	83.137	1.00	41.74
9585	O	PHE	B	435	-6.432	-7.728	83.595	1.00	41.77
9586	N	SER	B	436	-4.301	-7.691	82.836	1.00	42.94
9587	CA	SER	B	436	-4.026	-9.085	83.112	1.00	44.64
9588	CB	SER	B	436	-2.789	-9.541	82.334	1.00	44.86
9589	OG	SER	B	436	-1.630	-8.835	82.763	1.00	44.90
9590	C	SER	B	436	-3.757	-9.218	84.600	1.00	45.60
9591	O	SER	B	436	-3.373	-8.250	85.260	1.00	45.77
9592	N	LYS	B	437	-3.928	-10.429	85.112	1.00	46.66
9593	CA	LYS	B	437	-3.755	-10.726	86.533	1.00	48.13
9594	CB	LYS	B	437	-3.491	-12.223	86.714	1.00	48.28
9595	CG	LYS	B	437	-3.311	-12.681	88.151	1.00	50.57
9596	CD	LYS	B	437	-3.547	-14.195	88.281	1.00	52.46
9597	CE	LYS	B	437	-2.772	-14.796	89.461	1.00	54.80
9598	NZ	LYS	B	437	-1.407	-15.274	89.067	1.00	55.25
9599	C	LYS	B	437	-2.720	-9.873	87.295	1.00	48.47
9600	O	LYS	B	437	-2.975	-9.483	88.435	1.00	48.75
9601	N	GLU	B	438	-1.571	-9.576	86.685	1.00	48.91
9602	CA	GLU	B	438	-0.564	-8.733	87.342	1.00	49.40
9603	CB	GLU	B	438	0.713	-9.513	87.677	1.00	50.14
9604	CG	GLU	B	438	0.969	-9.700	89.171	1.00	53.11
9605	CD	GLU	B	438	0.538	-11.062	89.687	1.00	57.76
9606	OE1	GLU	B	438	-0.628	-11.447	89.431	1.00	59.42
9607	OE2	GLU	B	438	1.365	-11.747	90.350	1.00	58.90
9608	C	GLU	B	438	-0.218	-7.527	86.489	1.00	48.92
9609	O	GLU	B	438	0.873	-6.972	86.588	1.00	48.64
9610	N	ALA	B	439	-1.154	-7.138	85.632	1.00	48.41
9611	CA	ALA	B	439	-0.976	-5.969	84.791	1.00	47.44
9612	CB	ALA	B	439	-0.928	-4.714	85.638	1.00	47.48
9613	C	ALA	B	439	0.245	-6.057	83.892	1.00	46.91
9614	O	ALA	B	439	0.861	-5.046	83.582	1.00	47.27
9615	N	LYS	B	440	0.599	-7.261	83.467	1.00	46.22
9616	CA	LYS	B	440	1.685	-7.401	82.514	1.00	45.42
9617	CB	LYS	B	440	2.114	-8.865	82.382	1.00	45.72
9618	CG	LYS	B	440	3.629	-9.085	82.271	1.00	48.39
9619	CD	LYS	B	440	4.001	-10.582	82.337	1.00	51.54
9620	CE	LYS	B	440	5.446	-10.819	82.828	1.00	54.11
9621	NZ	LYS	B	440	5.569	-11.261	84.272	1.00	55.44
9622	C	LYS	B	440	1.133	-6.879	81.203	1.00	44.23
9623	O	LYS	B	440	1.822	-6.199	80.446	1.00	44.04
9624	N	TYR	B	441	-0.137	-7.172	80.943	1.00	42.93
9625	CA	TYR	B	441	-0.770	-6.680	79.723	1.00	41.53
9626	CB	TYR	B	441	-1.017	-7.819	78.736	1.00	41.51
9627	CG	TYR	B	441	0.183	-8.690	78.517	1.00	42.29
9628	CD1	TYR	B	441	0.450	-9.747	79.362	1.00	44.21
9629	CE1	TYR	B	441	1.560	-10.548	79.177	1.00	45.77

FIGURE 3 GG

A	B	C	D	E	F	G	H	I	J
9630	CZ	TYR	B	441	2.410	-10.297	78.129	1.00	45.67
9631	OH	TYR	B	441	3.508	-11.105	77.952	1.00	48.44
9632	CE2	TYR	B	441	2.170	-9.252	77.268	1.00	45.14
9633	CD2	TYR	B	441	1.057	-8.453	77.466	1.00	44.36
9634	C	TYR	B	441	-2.086	-5.999	80.034	1.00	40.43
9635	O	TYR	B	441	-2.644	-6.162	81.116	1.00	39.93
9636	N	TYR	B	442	-2.575	-5.224	79.076	1.00	39.24
9637	CA	TYR	B	442	-3.888	-4.622	79.204	1.00	38.12
9638	CB	TYR	B	442	-3.860	-3.272	79.937	1.00	37.79
9639	CG	TYR	B	442	-3.000	-2.211	79.308	1.00	36.99
9640	CD1	TYR	B	442	-1.625	-2.194	79.505	1.00	37.49
9641	CE1	TYR	B	442	-0.833	-1.212	78.931	1.00	37.66
9642	CZ	TYR	B	442	-1.422	-0.227	78.170	1.00	38.20
9643	OH	TYR	B	442	-0.647	0.754	77.596	1.00	38.96
9644	CE2	TYR	B	442	-2.784	-0.228	77.961	1.00	36.90
9645	CD2	TYR	B	442	-3.560	-1.211	78.537	1.00	36.42
9646	C	TYR	B	442	-4.563	-4.490	77.858	1.00	37.75
9647	O	TYR	B	442	-3.913	-4.278	76.823	1.00	37.67
9648	N	GLN	B	443	-5.878	-4.659	77.874	1.00	36.72
9649	CA	GLN	B	443	-6.651	-4.475	76.672	1.00	36.23
9650	CB	GLN	B	443	-7.711	-5.553	76.518	1.00	36.03
9651	CG	GLN	B	443	-8.658	-5.236	75.375	1.00	35.04
9652	CD	GLN	B	443	-9.951	-5.958	75.506	1.00	34.59
9653	OE1	GLN	B	443	-10.484	-6.080	76.606	1.00	36.36
9654	NE2	GLN	B	443	-10.460	-6.464	74.397	1.00	34.60
9655	C	GLN	B	443	-7.337	-3.127	76.756	1.00	36.34
9656	O	GLN	B	443	-8.010	-2.816	77.743	1.00	35.78
9657	N	LEU	B	444	-7.147	-2.326	75.723	1.00	36.43
9658	CA	LEU	B	444	-7.787	-1.044	75.651	1.00	37.01
9659	CB	LEU	B	444	-6.858	-0.040	75.005	1.00	37.61
9660	CG	LEU	B	444	-6.263	1.006	75.933	1.00	38.23
9661	CD1	LEU	B	444	-6.423	0.575	77.361	1.00	38.86
9662	CD2	LEU	B	444	-4.808	1.225	75.567	1.00	38.29
9663	C	LEU	B	444	-9.023	-1.169	74.802	1.00	37.52
9664	O	LEU	B	444	-9.020	-1.861	73.777	1.00	37.47
9665	N	ARG	B	445	-10.074	-0.480	75.223	1.00	37.73
9666	CA	ARG	B	445	-11.310	-0.474	74.482	1.00	38.31
9667	CB	ARG	B	445	-12.346	-1.350	75.178	1.00	38.87
9668	CG	ARG	B	445	-13.533	-1.688	74.303	1.00	42.76
9669	CD	ARG	B	445	-14.843	-1.000	74.669	1.00	47.80
9670	NE	ARG	B	445	-15.287	-1.361	76.013	1.00	51.94
9671	CZ	ARG	B	445	-16.556	-1.532	76.353	1.00	54.29
9672	NH1	ARG	B	445	-16.873	-1.853	77.599	1.00	54.15
9673	NH2	ARG	B	445	-17.511	-1.384	75.440	1.00	56.63
9674	C	ARG	B	445	-11.835	0.939	74.338	1.00	37.77
9675	O	ARG	B	445	-12.249	1.556	75.312	1.00	37.63
9676	N	CYS	B	446	-11.790	1.470	73.128	1.00	37.48
9677	CA	CYS	B	446	-12.403	2.759	72.914	1.00	37.98
9678	CB	CYS	B	446	-11.512	3.700	72.094	1.00	38.50
9679	SG	CYS	B	446	-11.923	3.914	70.361	1.00	39.17
9680	C	CYS	B	446	-13.755	2.520	72.262	1.00	37.44

FIGURE 3 GH

A	B	C	D	E	F	G	H	I	J
9681	O	CYS	B	446	-13.878	1.724	71.325	1.00	37.58
9682	N	SER	B	447	-14.770	3.181	72.801	1.00	36.87
9683	CA	SER	B	447	-16.121	3.056	72.295	1.00	36.06
9684	CB	SER	B	447	-17.122	2.929	73.438	1.00	36.12
9685	OG	SER	B	447	-16.507	2.481	74.615	1.00	37.23
9686	C	SER	B	447	-16.522	4.275	71.515	1.00	35.55
9687	O	SER	B	447	-17.706	4.497	71.328	1.00	36.20
9688	N	GLY	B	448	-15.581	5.099	71.087	1.00	35.02
9689	CA	GLY	B	448	-15.976	6.242	70.284	1.00	35.18
9690	C	GLY	B	448	-14.985	7.371	70.326	1.00	35.66
9691	O	GLY	B	448	-14.066	7.358	71.159	1.00	35.53
9692	N	PRO	B	449	-15.225	8.399	69.513	1.00	35.54
9693	CA	PRO	B	449	-16.452	8.519	68.730	1.00	36.01
9694	CB	PRO	B	449	-16.529	10.019	68.437	1.00	35.79
9695	CG	PRO	B	449	-15.303	10.613	69.029	1.00	35.21
9696	CD	PRO	B	449	-14.330	9.538	69.289	1.00	35.44
9697	C	PRO	B	449	-16.445	7.763	67.420	1.00	36.31
9698	O	PRO	B	449	-17.496	7.669	66.801	1.00	36.67
9699	N	GLY	B	450	-15.291	7.273	66.985	1.00	36.24
9700	CA	GLY	B	450	-15.233	6.492	65.763	1.00	35.98
9701	C	GLY	B	450	-15.727	5.092	66.085	1.00	35.94
9702	O	GLY	B	450	-16.284	4.881	67.157	1.00	35.95
9703	N	LEU	B	451	-15.508	4.134	65.187	1.00	35.82
9704	CA	LEU	B	451	-15.958	2.775	65.409	1.00	35.69
9705	CB	LEU	B	451	-15.798	1.942	64.138	1.00	35.37
9706	CG	LEU	B	451	-16.637	2.364	62.934	1.00	36.88
9707	CD1	LEU	B	451	-18.043	2.722	63.371	1.00	39.09
9708	CD2	LEU	B	451	-16.684	1.242	61.902	1.00	36.51
9709	C	LEU	B	451	-15.163	2.145	66.532	1.00	35.78
9710	O	LEU	B	451	-13.961	2.287	66.602	1.00	35.77
9711	N	PRO	B	452	-15.841	1.442	67.418	1.00	36.02
9712	CA	PRO	B	452	-15.164	0.787	68.530	1.00	36.49
9713	CB	PRO	B	452	-16.214	-0.211	69.018	1.00	36.60
9714	CG	PRO	B	452	-17.502	0.466	68.737	1.00	36.28
9715	CD	PRO	B	452	-17.298	1.227	67.442	1.00	35.76
9716	C	PRO	B	452	-13.907	0.071	68.048	1.00	36.91
9717	O	PRO	B	452	-13.890	-0.497	66.961	1.00	37.14
9718	N	LEU	B	453	-12.861	0.103	68.860	1.00	37.38
9719	CA	LEU	B	453	-11.595	-0.518	68.509	1.00	37.79
9720	CB	LEU	B	453	-10.662	0.548	67.909	1.00	38.09
9721	CG	LEU	B	453	-9.130	0.424	67.895	1.00	39.23
9722	CD1	LEU	B	453	-8.581	0.806	69.245	1.00	41.73
9723	CD2	LEU	B	453	-8.527	1.356	66.877	1.00	38.74
9724	C	LEU	B	453	-11.009	-1.163	69.761	1.00	37.97
9725	O	LEU	B	453	-10.954	-0.529	70.810	1.00	38.14
9726	N	TYR	B	454	-10.614	-2.431	69.664	1.00	38.19
9727	CA	TYR	B	454	-10.018	-3.156	70.792	1.00	38.49
9728	CB	TYR	B	454	-10.786	-4.451	71.099	1.00	38.13
9729	CG	TYR	B	454	-12.241	-4.232	71.417	1.00	38.60
9730	CD1	TYR	B	454	-12.725	-4.381	72.711	1.00	38.94
9731	CE1	TYR	B	454	-14.068	-4.170	73.001	1.00	37.86

FIGURE 3 GI

A	B	C	D	E	F	G	H	I	J
9732	CZ	TYR	B	454	-14.920	-3.799	71.988	1.00	39.51
9733	OH	TYR	B	454	-16.261	-3.584	72.236	1.00	40.91
9734	CE2	TYR	B	454	-14.452	-3.651	70.698	1.00	39.29
9735	CD2	TYR	B	454	-13.135	-3.864	70.422	1.00	38.35
9736	C	TYR	B	454	-8.543	-3.484	70.539	1.00	38.72
9737	O	TYR	B	454	-8.198	-4.055	69.504	1.00	38.95
9738	N	THR	B	455	-7.680	-3.133	71.488	1.00	38.84
9739	CA	THR	B	455	-6.247	-3.378	71.332	1.00	38.93
9740	CB	THR	B	455	-5.498	-2.084	71.007	1.00	38.87
9741	OG1	THR	B	455	-5.832	-1.074	71.970	1.00	38.92
9742	CG2	THR	B	455	-5.949	-1.515	69.675	1.00	38.16
9743	C	THR	B	455	-5.612	-4.010	72.552	1.00	39.32
9744	O	THR	B	455	-6.117	-3.875	73.669	1.00	39.52
9745	N	LEU	B	456	-4.499	-4.703	72.326	1.00	39.79
9746	CA	LEU	B	456	-3.757	-5.353	73.399	1.00	40.44
9747	CB	LEU	B	456	-3.461	-6.798	73.042	1.00	40.42
9748	CG	LEU	B	456	-3.868	-7.892	74.030	1.00	42.00
9749	CD1	LEU	B	456	-2.769	-8.937	74.072	1.00	42.32
9750	CD2	LEU	B	456	-4.161	-7.367	75.430	1.00	42.07
9751	C	LEU	B	456	-2.443	-4.600	73.573	1.00	40.92
9752	O	LEU	B	456	-1.850	-4.143	72.590	1.00	41.11
9753	N	HIS	B	457	-1.989	-4.467	74.814	1.00	41.21
9754	CA	HIS	B	457	-0.764	-3.742	75.089	1.00	41.70
9755	CB	HIS	B	457	-1.076	-2.289	75.445	1.00	41.48
9756	CG	HIS	B	457	-2.119	-1.676	74.576	1.00	39.95
9757	ND1	HIS	B	457	-1.832	-0.706	73.645	1.00	38.88
9758	CE1	HIS	B	457	-2.941	-0.363	73.016	1.00	38.91
9759	NE2	HIS	B	457	-3.938	-1.077	73.509	1.00	37.88
9760	CD2	HIS	B	457	-3.449	-1.910	74.482	1.00	38.62
9761	C	HIS	B	457	-0.015	-4.360	76.244	1.00	42.55
9762	O	HIS	B	457	-0.616	-4.954	77.146	1.00	42.69
9763	N	SER	B	458	1.304	-4.206	76.232	1.00	43.43
9764	CA	SER	B	458	2.094	-4.676	77.356	1.00	44.71
9765	CB	SER	B	458	3.357	-5.398	76.897	1.00	44.67
9766	OG	SER	B	458	4.135	-4.566	76.061	1.00	45.67
9767	C	SER	B	458	2.424	-3.460	78.205	1.00	45.51
9768	O	SER	B	458	2.696	-2.379	77.682	1.00	44.86
9769	N	SER	B	459	2.395	-3.636	79.520	1.00	46.90
9770	CA	SER	B	459	2.622	-2.509	80.408	1.00	48.50
9771	CB	SER	B	459	1.924	-2.735	81.747	1.00	48.28
9772	OG	SER	B	459	2.207	-4.021	82.264	1.00	49.98
9773	C	SER	B	459	4.100	-2.126	80.590	1.00	49.47
9774	O	SER	B	459	4.407	-1.007	80.992	1.00	49.61
9775	N	VAL	B	460	5.011	-3.035	80.255	1.00	50.94
9776	CA	VAL	B	460	6.439	-2.775	80.445	1.00	51.98
9777	CB	VAL	B	460	7.315	-3.923	79.914	1.00	52.10
9778	CG1	VAL	B	460	8.782	-3.620	80.154	1.00	52.94
9779	CG2	VAL	B	460	6.938	-5.221	80.594	1.00	52.80
9780	C	VAL	B	460	6.874	-1.456	79.829	1.00	52.32
9781	O	VAL	B	460	7.412	-0.595	80.518	1.00	52.84
9782	N	ASN	B	461	6.655	-1.294	78.534	1.00	52.98

FIGURE 3 GJ

A	B	C	D	E	F	G	H	I	J
9783	CA	ASN	B	461	7.001	-0.038	77.875	1.00	53.52
9784	CB	ASN	B	461	8.271	-0.176	77.034	1.00	53.99
9785	CG	ASN	B	461	9.539	0.100	77.842	1.00	55.10
9786	OD1	ASN	B	461	9.873	1.259	78.116	1.00	55.97
9787	ND2	ASN	B	461	10.246	-0.963	78.230	1.00	55.66
9788	C	ASN	B	461	5.839	0.487	77.052	1.00	53.51
9789	O	ASN	B	461	6.019	1.187	76.053	1.00	53.38
9790	N	ASP	B	462	4.641	0.127	77.502	1.00	53.66
9791	CA	ASP	B	462	3.388	0.542	76.880	1.00	53.73
9792	CB	ASP	B	462	2.902	1.862	77.479	1.00	53.78
9793	CG	ASP	B	462	2.632	1.752	78.955	1.00	54.43
9794	OD1	ASP	B	462	3.211	2.549	79.731	1.00	55.45
9795	OD2	ASP	B	462	1.863	0.890	79.431	1.00	54.43
9796	C	ASP	B	462	3.438	0.648	75.368	1.00	53.40
9797	O	ASP	B	462	3.141	1.703	74.811	1.00	53.36
9798	N	LYS	B	463	3.816	-0.436	74.702	1.00	52.90
9799	CA	LYS	B	463	3.768	-0.435	73.251	1.00	52.73
9800	CB	LYS	B	463	5.080	-0.926	72.633	1.00	53.15
9801	CG	LYS	B	463	5.195	-2.435	72.468	1.00	55.06
9802	CD	LYS	B	463	6.260	-2.758	71.435	1.00	57.55
9803	CE	LYS	B	463	5.943	-4.039	70.664	1.00	59.47
9804	NZ	LYS	B	463	6.763	-4.144	69.409	1.00	59.87
9805	C	LYS	B	463	2.573	-1.270	72.787	1.00	51.90
9806	O	LYS	B	463	2.077	-2.139	73.507	1.00	51.86
9807	N	GLY	B	464	2.091	-0.985	71.591	1.00	50.93
9808	CA	GLY	B	464	0.976	-1.733	71.063	1.00	49.76
9809	C	GLY	B	464	1.427	-3.098	70.591	1.00	48.51
9810	O	GLY	B	464	2.409	-3.214	69.874	1.00	48.50
9811	N	LEU	B	465	0.729	-4.140	71.016	1.00	47.52
9812	CA	LEU	B	465	1.030	-5.469	70.523	1.00	46.73
9813	CB	LEU	B	465	0.649	-6.530	71.555	1.00	46.55
9814	CG	LEU	B	465	1.474	-6.509	72.848	1.00	46.30
9815	CD1	LEU	B	465	0.704	-7.128	73.979	1.00	43.80
9816	CD2	LEU	B	465	2.822	-7.213	72.666	1.00	45.01
9817	C	LEU	B	465	0.258	-5.683	69.222	1.00	46.37
9818	O	LEU	B	465	0.848	-5.950	68.169	1.00	46.31
9819	N	ARG	B	466	-1.062	-5.521	69.289	1.00	45.36
9820	CA	ARG	B	466	-1.897	-5.788	68.128	1.00	44.30
9821	CB	ARG	B	466	-1.915	-7.287	67.854	1.00	44.34
9822	CG	ARG	B	466	-2.567	-8.082	68.969	1.00	44.74
9823	CD	ARG	B	466	-2.273	-9.569	68.931	1.00	44.86
9824	NE	ARG	B	466	-0.847	-9.831	69.115	1.00	44.16
9825	CZ	ARG	B	466	-0.291	-10.154	70.271	1.00	44.48
9826	NH1	ARG	B	466	1.017	-10.375	70.344	1.00	44.39
9827	NH2	ARG	B	466	-1.041	-10.261	71.361	1.00	45.27
9828	C	ARG	B	466	-3.340	-5.332	68.252	1.00	43.59
9829	O	ARG	B	466	-3.863	-5.072	69.338	1.00	43.21
9830	N	VAL	B	467	-3.980	-5.268	67.097	1.00	42.75
9831	CA	VAL	B	467	-5.369	-4.922	67.005	1.00	41.90
9832	CB	VAL	B	467	-5.664	-4.313	65.637	1.00	42.12
9833	CG1	VAL	B	467	-7.081	-3.744	65.597	1.00	42.48

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FIGURE 3 GK

A	B	C	D	E	F	G	H	I	J
9834	CG2	VAL	B	467	-4.650	-3.202	65.333	1.00	42.81
9835	C	VAL	B	467	-6.170	-6.201	67.196	1.00	41.22
9836	O	VAL	B	467	-6.039	-7.142	66.417	1.00	41.01
9837	N	LEU	B	468	-6.982	-6.243	68.246	1.00	40.12
9838	CA	LEU	B	468	-7.828	-7.399	68.505	1.00	39.35
9839	CB	LEU	B	468	-8.260	-7.431	69.972	1.00	39.22
9840	CG	LEU	B	468	-7.149	-7.616	71.012	1.00	39.50
9841	CD1	LEU	B	468	-7.722	-7.565	72.418	1.00	39.92
9842	CD2	LEU	B	468	-6.424	-8.935	70.794	1.00	39.93
9843	C	LEU	B	468	-9.067	-7.355	67.616	1.00	38.66
9844	O	LEU	B	468	-9.380	-8.299	66.893	1.00	38.22
9845	N	GLU	B	469	-9.776	-6.240	67.678	1.00	38.22
9846	CA	GLU	B	469	-11.001	-6.078	66.908	1.00	37.30
9847	CB	GLU	B	469	-12.214	-6.450	67.742	1.00	37.22
9848	CG	GLU	B	469	-13.526	-6.249	67.005	1.00	37.38
9849	CD	GLU	B	469	-13.602	-7.106	65.761	1.00	37.88
9850	OE1	GLU	B	469	-13.746	-6.562	64.643	1.00	34.63
9851	OE2	GLU	B	469	-13.507	-8.340	65.913	1.00	39.57
9852	C	GLU	B	469	-11.111	-4.642	66.478	1.00	36.92
9853	O	GLU	B	469	-11.158	-3.739	67.311	1.00	36.60
9854	N	ASP	B	470	-11.151	-4.428	65.173	1.00	36.62
9855	CA	ASP	B	470	-11.196	-3.073	64.657	1.00	36.74
9856	CB	ASP	B	470	-10.052	-2.824	63.674	1.00	36.90
9857	CG	ASP	B	470	-10.163	-3.682	62.436	1.00	39.20
9858	OD1	ASP	B	470	-9.253	-3.593	61.570	1.00	41.35
9859	OD2	ASP	B	470	-11.124	-4.474	62.251	1.00	38.62
9860	C	ASP	B	470	-12.516	-2.688	64.001	1.00	36.27
9861	O	ASP	B	470	-12.692	-1.535	63.617	1.00	36.08
9862	N	ASN	B	471	-13.432	-3.636	63.851	1.00	35.57
9863	CA	ASN	B	471	-14.730	-3.329	63.260	1.00	34.94
9864	CB	ASN	B	471	-15.398	-2.204	64.052	1.00	34.49
9865	CG	ASN	B	471	-16.283	-2.724	65.145	1.00	34.14
9866	OD1	ASN	B	471	-17.202	-3.497	64.874	1.00	33.71
9867	ND2	ASN	B	471	-15.998	-2.349	66.392	1.00	33.93
9868	C	ASN	B	471	-14.664	-2.921	61.793	1.00	35.06
9869	O	ASN	B	471	-15.390	-2.014	61.353	1.00	34.47
9870	N	SER	B	472	-13.787	-3.559	61.024	1.00	34.95
9871	CA	SER	B	472	-13.676	-3.163	59.634	1.00	34.75
9872	CB	SER	B	472	-12.326	-3.557	59.016	1.00	34.94
9873	OG	SER	B	472	-12.115	-4.949	59.129	1.00	38.29
9874	C	SER	B	472	-14.866	-3.691	58.856	1.00	33.94
9875	O	SER	B	472	-15.292	-3.077	57.880	1.00	33.88
9876	N	ALA	B	473	-15.434	-4.809	59.304	1.00	33.57
9877	CA	ALA	B	473	-16.598	-5.340	58.613	1.00	33.41
9878	CB	ALA	B	473	-17.064	-6.637	59.228	1.00	33.35
9879	C	ALA	B	473	-17.718	-4.301	58.636	1.00	33.49
9880	O	ALA	B	473	-18.344	-4.025	57.615	1.00	32.91
9881	N	LEU	B	474	-17.953	-3.720	59.805	1.00	33.55
9882	CA	LEU	B	474	-19.018	-2.745	59.955	1.00	33.99
9883	CB	LEU	B	474	-19.268	-2.456	61.428	1.00	34.22
9884	CG	LEU	B	474	-20.243	-1.312	61.748	1.00	35.30

FIGURE 3 GL

A	B	C	D	E	F	G	H	I	J
9885	CD1	LEU	B	474	-21.642	-1.617	61.238	1.00	34.21
9886	CD2	LEU	B	474	-20.264	-1.083	63.245	1.00	34.84
9887	C	LEU	B	474	-18.651	-1.475	59.223	1.00	33.97
9888	O	LEU	B	474	-19.490	-0.847	58.599	1.00	33.99
9889	N	ASP	B	475	-17.381	-1.110	59.286	1.00	34.46
9890	CA	ASP	B	475	-16.914	0.051	58.566	1.00	35.26
9891	CB	ASP	B	475	-15.419	0.234	58.764	1.00	34.89
9892	CG	ASP	B	475	-14.904	1.486	58.114	1.00	34.68
9893	OD1	ASP	B	475	-14.294	1.378	57.024	1.00	36.50
9894	OD2	ASP	B	475	-15.073	2.621	58.605	1.00	33.48
9895	C	ASP	B	475	-17.235	-0.155	57.100	1.00	36.26
9896	O	ASP	B	475	-17.695	0.760	56.422	1.00	36.57
9897	N	LYS	B	476	-17.009	-1.373	56.619	1.00	37.51
9898	CA	LYS	B	476	-17.307	-1.702	55.235	1.00	38.64
9899	CB	LYS	B	476	-16.864	-3.133	54.895	1.00	39.35
9900	CG	LYS	B	476	-16.867	-3.452	53.387	1.00	42.66
9901	CD	LYS	B	476	-16.549	-4.930	53.071	1.00	46.42
9902	CE	LYS	B	476	-15.146	-5.353	53.556	1.00	49.78
9903	NZ	LYS	B	476	-14.011	-5.112	52.586	1.00	50.22
9904	C	LYS	B	476	-18.785	-1.515	54.913	1.00	38.54
9905	O	LYS	B	476	-19.136	-0.832	53.950	1.00	38.36
9906	N	MET	B	477	-19.682	-2.082	55.705	1.00	38.82
9907	CA	MET	B	477	-21.081	-1.959	55.285	1.00	39.10
9908	CB	MET	B	477	-21.981	-3.097	55.807	1.00	39.28
9909	CG	MET	B	477	-21.886	-3.480	57.261	1.00	41.02
9910	SD	MET	B	477	-23.103	-4.821	57.689	1.00	46.02
9911	CE	MET	B	477	-24.462	-4.449	56.569	1.00	44.10
9912	C	MET	B	477	-21.666	-0.546	55.451	1.00	39.01
9913	O	MET	B	477	-22.680	-0.194	54.852	1.00	38.91
9914	N	LEU	B	478	-20.965	0.287	56.207	1.00	39.11
9915	CA	LEU	B	478	-21.407	1.642	56.466	1.00	38.82
9916	CB	LEU	B	478	-20.855	2.085	57.823	1.00	38.62
9917	CG	LEU	B	478	-21.755	2.331	59.045	1.00	38.51
9918	CD1	LEU	B	478	-20.964	2.105	60.317	1.00	37.08
9919	CD2	LEU	B	478	-23.047	1.502	59.055	1.00	35.88
9920	C	LEU	B	478	-21.008	2.678	55.408	1.00	39.38
9921	O	LEU	B	478	-21.552	3.785	55.413	1.00	38.90
9922	N	GLN	B	479	-20.090	2.358	54.492	1.00	39.91
9923	CA	GLN	B	479	-19.596	3.450	53.631	1.00	40.99
9924	CB	GLN	B	479	-18.147	3.261	53.104	1.00	42.19
9925	CG	GLN	B	479	-17.943	2.372	51.893	1.00	44.87
9926	CD	GLN	B	479	-17.624	0.962	52.297	1.00	47.18
9927	OE1	GLN	B	479	-16.774	0.305	51.699	1.00	46.75
9928	NE2	GLN	B	479	-18.309	0.487	53.326	1.00	50.12
9929	C	GLN	B	479	-20.543	4.123	52.618	1.00	40.45
9930	O	GLN	B	479	-20.297	5.250	52.195	1.00	40.42
9931	N	ASN	B	480	-21.628	3.450	52.257	1.00	39.75
9932	CA	ASN	B	480	-22.617	4.071	51.395	1.00	39.17
9933	CB	ASN	B	480	-22.810	3.303	50.079	1.00	39.07
9934	CG	ASN	B	480	-23.389	1.934	50.283	1.00	38.34
9935	OD1	ASN	B	480	-23.675	1.532	51.405	1.00	39.33

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**FIGURE 3 GM**

A	B	C	D	E	F	G	H	I	J
9936	ND2	ASN	B	480	-23.562	1.197	49.195	1.00	37.35
9937	C	ASN	B	480	-23.952	4.292	52.122	1.00	38.84
9938	O	ASN	B	480	-25.018	4.289	51.492	1.00	38.34
9939	N	VAL	B	481	-23.884	4.458	53.445	1.00	37.77
9940	CA	VAL	B	481	-25.073	4.817	54.206	1.00	37.02
9941	CB	VAL	B	481	-25.599	3.678	55.168	1.00	37.04
9942	CG1	VAL	B	481	-24.615	2.580	55.334	1.00	36.01
9943	CG2	VAL	B	481	-26.077	4.215	56.508	1.00	36.67
9944	C	VAL	B	481	-24.946	6.178	54.875	1.00	36.63
9945	O	VAL	B	481	-23.948	6.503	55.486	1.00	36.05
9946	N	GLN	B	482	-25.978	6.987	54.718	1.00	36.78
9947	CA	GLN	B	482	-25.988	8.333	55.258	1.00	36.69
9948	CB	GLN	B	482	-27.107	9.136	54.611	1.00	36.71
9949	CG	GLN	B	482	-26.914	9.252	53.108	1.00	38.91
9950	CD	GLN	B	482	-28.133	9.801	52.401	1.00	40.62
9951	OE1	GLN	B	482	-28.209	11.003	52.113	1.00	40.56
9952	NE2	GLN	B	482	-29.095	8.929	52.125	1.00	40.90
9953	C	GLN	B	482	-26.137	8.298	56.763	1.00	36.68
9954	O	GLN	B	482	-27.238	8.346	57.293	1.00	36.60
9955	N	MET	B	483	-25.008	8.205	57.451	1.00	36.67
9956	CA	MET	B	483	-25.026	8.136	58.892	1.00	36.98
9957	CB	MET	B	483	-23.818	7.349	59.397	1.00	36.93
9958	CG	MET	B	483	-23.898	5.889	59.020	1.00	37.27
9959	SD	MET	B	483	-25.324	5.098	59.799	1.00	39.21
9960	CE	MET	B	483	-24.718	5.123	61.489	1.00	37.40
9961	C	MET	B	483	-25.048	9.517	59.487	1.00	37.15
9962	O	MET	B	483	-24.606	10.476	58.881	1.00	37.52
9963	N	PRO	B	484	-25.605	9.631	60.677	1.00	37.78
9964	CA	PRO	B	484	-25.653	10.925	61.363	1.00	37.84
9965	CB	PRO	B	484	-26.616	10.652	62.510	1.00	37.77
9966	CG	PRO	B	484	-26.409	9.174	62.777	1.00	37.96
9967	CD	PRO	B	484	-26.285	8.558	61.429	1.00	37.09
9968	C	PRO	B	484	-24.281	11.285	61.920	1.00	37.92
9969	O	PRO	B	484	-23.396	10.446	61.933	1.00	38.22
9970	N	SER	B	485	-24.099	12.517	62.378	1.00	38.27
9971	CA	SER	B	485	-22.843	12.863	63.023	1.00	38.32
9972	CB	SER	B	485	-22.113	13.991	62.285	1.00	38.62
9973	OG	SER	B	485	-22.789	15.229	62.422	1.00	38.59
9974	C	SER	B	485	-23.140	13.254	64.449	1.00	38.06
9975	O	SER	B	485	-24.299	13.373	64.844	1.00	38.12
9976	N	LYS	B	486	-22.094	13.397	65.242	1.00	38.14
9977	CA	LYS	B	486	-22.291	13.834	66.598	1.00	37.92
9978	CB	LYS	B	486	-21.804	12.788	67.589	1.00	37.32
9979	CG	LYS	B	486	-22.295	13.064	68.988	1.00	36.10
9980	CD	LYS	B	486	-21.626	12.167	69.984	1.00	35.39
9981	CE	LYS	B	486	-22.623	11.437	70.825	1.00	33.81
9982	NZ	LYS	B	486	-21.933	10.471	71.696	1.00	31.22
9983	C	LYS	B	486	-21.549	15.125	66.827	1.00	38.55
9984	O	LYS	B	486	-20.406	15.277	66.404	1.00	38.40
9985	N	LYS	B	487	-22.213	16.080	67.460	1.00	39.41
9986	CA	LYS	B	487	-21.515	17.277	67.882	1.00	40.37



FIGURE 3 GN

A	B	C	D	E	F	G	H	I	J
9987	CB	LYS	B	487	-22.202	18.552	67.416	1.00	40.73
9988	CG	LYS	B	487	-21.733	19.785	68.194	1.00	42.32
9989	CD	LYS	B	487	-21.414	20.922	67.260	1.00	45.83
9990	CE	LYS	B	487	-21.483	22.276	67.946	1.00	48.42
9991	NZ	LYS	B	487	-21.094	23.380	67.002	1.00	49.56
9992	C	LYS	B	487	-21.461	17.245	69.385	1.00	40.25
9993	O	LYS	B	487	-22.481	17.046	70.034	1.00	40.45
9994	N	LEU	B	488	-20.262	17.395	69.931	1.00	40.48
9995	CA	LEU	B	488	-20.063	17.425	71.371	1.00	40.70
9996	CB	LEU	B	488	-19.056	16.371	71.791	1.00	40.34
9997	CG	LEU	B	488	-19.267	15.608	73.101	1.00	40.39
9998	CD1	LEU	B	488	-17.932	15.099	73.580	1.00	38.50
9999	CD2	LEU	B	488	-19.939	16.422	74.200	1.00	38.59
10000	C	LEU	B	488	-19.501	18.807	71.635	1.00	41.34
10001	O	LEU	B	488	-18.436	19.152	71.134	1.00	41.42
10002	N	ASP	B	489	-20.234	19.602	72.400	1.00	42.14
10003	CA	ASP	B	489	-19.851	20.970	72.681	1.00	42.96
10004	CB	ASP	B	489	-20.318	21.886	71.555	1.00	43.27
10005	CG	ASP	B	489	-19.303	22.972	71.216	1.00	45.38
10006	OD1	ASP	B	489	-18.123	22.647	70.974	1.00	47.86
10007	OD2	ASP	B	489	-19.597	24.181	71.142	1.00	48.46
10008	C	ASP	B	489	-20.491	21.382	74.001	1.00	43.31
10009	O	ASP	B	489	-21.108	20.563	74.682	1.00	43.06
10010	N	PHE	B	490	-20.347	22.650	74.359	1.00	43.92
10011	CA	PHE	B	490	-20.862	23.128	75.627	1.00	44.57
10012	CB	PHE	B	490	-19.730	23.186	76.655	1.00	44.71
10013	CG	PHE	B	490	-18.628	24.148	76.295	1.00	45.17
10014	CD1	PHE	B	490	-18.728	25.493	76.610	1.00	45.54
10015	CE1	PHE	B	490	-17.717	26.378	76.276	1.00	46.24
10016	CZ	PHE	B	490	-16.592	25.925	75.610	1.00	46.81
10017	CE2	PHE	B	490	-16.480	24.588	75.279	1.00	46.81
10018	CD2	PHE	B	490	-17.496	23.706	75.623	1.00	46.16
10019	C	PHE	B	490	-21.491	24.505	75.500	1.00	45.08
10020	O	PHE	B	490	-21.269	25.211	74.516	1.00	44.51
10021	N	ILE	B	491	-22.308	24.862	76.487	1.00	45.90
10022	CA	ILE	B	491	-22.814	26.224	76.601	1.00	47.24
10023	CB	ILE	B	491	-24.325	26.364	76.291	1.00	47.15
10024	CG1	ILE	B	491	-25.148	25.408	77.147	1.00	47.50
10025	CD1	ILE	B	491	-26.606	25.519	76.910	1.00	48.34
10026	CG2	ILE	B	491	-24.606	26.135	74.806	1.00	47.94
10027	C	ILE	B	491	-22.512	26.699	78.008	1.00	48.15
10028	O	ILE	B	491	-22.203	25.899	78.893	1.00	47.96
10029	N	ILE	B	492	-22.580	28.013	78.191	1.00	49.85
10030	CA	ILE	B	492	-22.314	28.653	79.468	1.00	50.95
10031	CB	ILE	B	492	-21.274	29.775	79.286	1.00	51.11
10032	CG1	ILE	B	492	-20.066	29.250	78.507	1.00	51.12
10033	CD1	ILE	B	492	-18.792	30.041	78.745	1.00	52.47
10034	CG2	ILE	B	492	-20.844	30.363	80.648	1.00	51.24
10035	C	ILE	B	492	-23.622	29.220	79.971	1.00	51.58
10036	O	ILE	B	492	-24.331	29.896	79.235	1.00	52.23
10037	N	LEU	B	493	-23.962	28.943	81.219	1.00	52.29

FIGURE 3 GO

A	B	C	D	E	F	G	H	I	J
10038	CA	LEU	B	493	-25.233	29.413	81.737	1.00	52.84
10039	CB	LEU	B	493	-26.069	28.229	82.221	1.00	52.51
10040	CG	LEU	B	493	-27.200	27.831	81.266	1.00	52.66
10041	CD1	LEU	B	493	-27.650	26.412	81.500	1.00	49.42
10042	CD2	LEU	B	493	-26.803	28.028	79.806	1.00	53.67
10043	C	LEU	B	493	-25.098	30.481	82.828	1.00	53.43
10044	O	LEU	B	493	-25.801	31.503	82.822	1.00	53.94
10045	N	ASN	B	494	-24.172	30.261	83.745	1.00	53.60
10046	CA	ASN	B	494	-24.003	31.154	84.875	1.00	53.59
10047	CB	ASN	B	494	-24.875	30.649	86.023	1.00	53.96
10048	CG	ASN	B	494	-25.182	31.711	87.060	1.00	55.31
10049	OD1	ASN	B	494	-26.350	31.975	87.354	1.00	57.50
10050	ND2	ASN	B	494	-24.143	32.297	87.649	1.00	55.83
10051	C	ASN	B	494	-22.545	31.072	85.254	1.00	53.34
10052	O	ASN	B	494	-22.205	30.710	86.373	1.00	53.44
10053	N	GLU	B	495	-21.678	31.370	84.294	1.00	53.22
10054	CA	GLU	B	495	-20.240	31.296	84.519	1.00	53.15
10055	CB	GLU	B	495	-19.865	32.021	85.817	1.00	53.73
10056	CG	GLU	B	495	-19.640	33.515	85.586	1.00	56.37
10057	CD	GLU	B	495	-20.186	34.399	86.692	1.00	59.67
10058	OE1	GLU	B	495	-21.297	34.110	87.211	1.00	61.56
10059	OE2	GLU	B	495	-19.507	35.399	87.023	1.00	60.11
10060	C	GLU	B	495	-19.684	29.864	84.461	1.00	52.30
10061	O	GLU	B	495	-18.467	29.658	84.522	1.00	52.40
10062	N	THR	B	496	-20.574	28.884	84.304	1.00	50.82
10063	CA	THR	B	496	-20.168	27.480	84.229	1.00	49.32
10064	CB	THR	B	496	-20.859	26.684	85.331	1.00	49.61
10065	OG1	THR	B	496	-22.249	27.008	85.319	1.00	51.05
10066	CG2	THR	B	496	-20.425	27.182	86.702	1.00	50.12
10067	C	THR	B	496	-20.488	26.845	82.882	1.00	47.62
10068	O	THR	B	496	-21.502	27.161	82.258	1.00	47.49
10069	N	LYS	B	497	-19.609	25.954	82.438	1.00	45.55
10070	CA	LYS	B	497	-19.807	25.223	81.198	1.00	43.78
10071	CB	LYS	B	497	-18.479	24.646	80.715	1.00	44.12
10072	CG	LYS	B	497	-17.656	25.556	79.813	1.00	45.88
10073	CD	LYS	B	497	-16.173	25.423	80.161	1.00	48.55
10074	CE	LYS	B	497	-15.283	25.386	78.934	1.00	50.48
10075	NZ	LYS	B	497	-13.839	25.324	79.336	1.00	52.98
10076	C	LYS	B	497	-20.778	24.064	81.422	1.00	41.98
10077	O	LYS	B	497	-20.770	23.433	82.474	1.00	41.37
10078	N	PHE	B	498	-21.612	23.785	80.431	1.00	40.01
10079	CA	PHE	B	498	-22.533	22.650	80.515	1.00	38.10
10080	CB	PHE	B	498	-23.934	23.108	80.887	1.00	37.53
10081	CG	PHE	B	498	-24.057	23.520	82.322	1.00	35.93
10082	CD1	PHE	B	498	-24.063	22.569	83.326	1.00	34.06
10083	CE1	PHE	B	498	-24.157	22.943	84.646	1.00	33.01
10084	CZ	PHE	B	498	-24.237	24.280	84.980	1.00	31.46
10085	CE2	PHE	B	498	-24.230	25.229	83.986	1.00	32.07
10086	CD2	PHE	B	498	-24.123	24.857	82.672	1.00	33.44
10087	C	PHE	B	498	-22.504	21.958	79.177	1.00	37.48
10088	O	PHE	B	498	-22.656	22.595	78.134	1.00	38.07

FIGURE 3 GP

A	B	C	D	E	F	G	H	I	J
10089	N	TRP	B	499	-22.289	20.654	79.192	1.00	36.11
10090	CA	TRP	B	499	-22.099	19.941	77.944	1.00	35.50
10091	CB	TRP	B	499	-21.059	18.840	78.145	1.00	35.08
10092	CG	TRP	B	499	-19.720	19.429	78.446	1.00	35.03
10093	CD1	TRP	B	499	-19.285	19.925	79.646	1.00	32.74
10094	NE1	TRP	B	499	-18.009	20.413	79.510	1.00	34.52
10095	CE2	TRP	B	499	-17.598	20.242	78.211	1.00	34.52
10096	CD2	TRP	B	499	-18.655	19.636	77.513	1.00	34.41
10097	CE3	TRP	B	499	-18.481	19.344	76.156	1.00	34.27
10098	CZ3	TRP	B	499	-17.291	19.669	75.554	1.00	35.89
10099	CH2	TRP	B	499	-16.256	20.275	76.277	1.00	35.53
10100	CZ2	TRP	B	499	-16.393	20.567	77.604	1.00	34.90
10101	C	TRP	B	499	-23.376	19.375	77.348	1.00	35.10
10102	O	TRP	B	499	-24.303	19.022	78.059	1.00	34.98
10103	N	TYR	B	500	-23.404	19.278	76.027	1.00	34.63
10104	CA	TYR	B	500	-24.515	18.652	75.356	1.00	34.16
10105	CB	TYR	B	500	-25.501	19.714	74.887	1.00	34.31
10106	CG	TYR	B	500	-24.938	20.604	73.821	1.00	34.73
10107	CD1	TYR	B	500	-25.082	20.289	72.479	1.00	35.98
10108	CE1	TYR	B	500	-24.560	21.113	71.494	1.00	37.75
10109	CZ	TYR	B	500	-23.879	22.261	71.853	1.00	37.36
10110	OH	TYR	B	500	-23.362	23.085	70.876	1.00	40.04
10111	CE2	TYR	B	500	-23.715	22.587	73.171	1.00	36.68
10112	CD2	TYR	B	500	-24.251	21.763	74.152	1.00	36.43
10113	C	TYR	B	500	-23.976	17.918	74.157	1.00	33.95
10114	O	TYR	B	500	-22.852	18.188	73.709	1.00	33.81
10115	N	GLN	B	501	-24.774	16.993	73.637	1.00	33.20
10116	CA	GLN	B	501	-24.457	16.357	72.372	1.00	33.45
10117	CB	GLN	B	501	-23.984	14.895	72.526	1.00	33.76
10118	CG	GLN	B	501	-25.024	13.939	73.127	1.00	33.49
10119	CD	GLN	B	501	-24.548	12.494	73.163	1.00	34.53
10120	OE1	GLN	B	501	-23.433	12.198	73.632	1.00	33.50
10121	NE2	GLN	B	501	-25.388	11.588	72.670	1.00	31.69
10122	C	GLN	B	501	-25.696	16.436	71.492	1.00	33.81
10123	O	GLN	B	501	-26.832	16.526	71.978	1.00	33.93
10124	N	MET	B	502	-25.471	16.441	70.188	1.00	33.70
10125	CA	MET	B	502	-26.562	16.410	69.250	1.00	33.82
10126	CB	MET	B	502	-26.696	17.734	68.516	1.00	33.95
10127	CG	MET	B	502	-27.329	18.801	69.342	1.00	33.05
10128	SD	MET	B	502	-27.201	20.315	68.472	1.00	33.25
10129	CE	MET	B	502	-28.235	21.312	69.478	1.00	30.68
10130	C	MET	B	502	-26.216	15.356	68.261	1.00	33.95
10131	O	MET	B	502	-25.117	15.363	67.716	1.00	34.17
10132	N	ILE	B	503	-27.129	14.419	68.065	1.00	33.81
10133	CA	ILE	B	503	-26.933	13.433	67.031	1.00	33.50
10134	CB	ILE	B	503	-27.669	12.136	67.366	1.00	32.92
10135	CG1	ILE	B	503	-27.106	11.523	68.663	1.00	31.39
10136	CD1	ILE	B	503	-25.613	11.166	68.615	1.00	27.70
10137	CG2	ILE	B	503	-27.564	11.150	66.215	1.00	32.58
10138	C	ILE	B	503	-27.488	14.161	65.824	1.00	34.30
10139	O	ILE	B	503	-28.673	14.513	65.776	1.00	34.09

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3GQ**

A	B	C	D	E	F	G	H	I	J
10140	N	LEU	B	504	-26.609	14.440	64.872	1.00	35.45
10141	CA	LEU	B	504	-26.972	15.267	63.726	1.00	36.12
10142	CB	LEU	B	504	-25.885	16.316	63.475	1.00	36.38
10143	CG	LEU	B	504	-25.567	17.341	64.570	1.00	36.67
10144	CD1	LEU	B	504	-24.221	17.993	64.288	1.00	35.93
10145	CD2	LEU	B	504	-26.659	18.404	64.706	1.00	35.45
10146	C	LEU	B	504	-27.216	14.484	62.445	1.00	37.22
10147	O	LEU	B	504	-26.401	13.645	62.058	1.00	37.27
10148	N	PRO	B	505	-28.351	14.760	61.799	1.00	37.60
10149	CA	PRO	B	505	-28.702	14.166	60.511	1.00	38.16
10150	CB	PRO	B	505	-29.913	14.990	60.069	1.00	38.11
10151	CG	PRO	B	505	-30.500	15.517	61.311	1.00	37.73
10152	CD	PRO	B	505	-29.397	15.663	62.302	1.00	37.25
10153	C	PRO	B	505	-27.595	14.368	59.486	1.00	39.24
10154	O	PRO	B	505	-26.853	15.340	59.575	1.00	39.35
10155	N	PRO	B	506	-27.505	13.468	58.513	1.00	39.76
10156	CA	PRO	B	506	-26.495	13.573	57.456	1.00	40.19
10157	CB	PRO	B	506	-26.768	12.367	56.548	1.00	40.20
10158	CG	PRO	B	506	-27.981	11.665	57.081	1.00	40.90
10159	CD	PRO	B	506	-28.377	12.292	58.380	1.00	39.97
10160	C	PRO	B	506	-26.705	14.857	56.683	1.00	40.43
10161	O	PRO	B	506	-27.818	15.365	56.687	1.00	40.64
10162	N	HIS	B	507	-25.662	15.372	56.035	1.00	41.02
10163	CA	HIS	B	507	-25.761	16.622	55.288	1.00	41.46
10164	CB	HIS	B	507	-26.592	16.427	54.020	1.00	41.76
10165	CG	HIS	B	507	-26.332	15.126	53.331	1.00	42.08
10166	ND1	HIS	B	507	-25.069	14.733	52.936	1.00	42.83
10167	CE1	HIS	B	507	-25.138	13.543	52.366	1.00	43.44
10168	NE2	HIS	B	507	-26.400	13.147	52.381	1.00	43.74
10169	CD2	HIS	B	507	-27.166	14.118	52.984	1.00	42.93
10170	C	HIS	B	507	-26.387	17.696	56.157	1.00	41.97
10171	O	HIS	B	507	-27.146	18.535	55.681	1.00	42.17
10172	N	PHE	B	508	-26.086	17.664	57.445	1.00	42.32
10173	CA	PHE	B	508	-26.630	18.665	58.330	1.00	43.43
10174	CB	PHE	B	508	-25.972	18.611	59.698	1.00	43.24
10175	CG	PHE	B	508	-26.444	19.684	60.620	1.00	44.63
10176	CD1	PHE	B	508	-27.774	19.754	60.990	1.00	44.60
10177	CE1	PHE	B	508	-28.222	20.744	61.833	1.00	43.08
10178	CZ	PHE	B	508	-27.358	21.678	62.304	1.00	43.80
10179	CE2	PHE	B	508	-26.027	21.634	61.937	1.00	44.80
10180	CD2	PHE	B	508	-25.574	20.643	61.095	1.00	44.57
10181	C	PHE	B	508	-26.427	20.036	57.701	1.00	43.83
10182	O	PHE	B	508	-25.386	20.313	57.116	1.00	44.39
10183	N	ASP	B	509	-27.421	20.896	57.828	1.00	44.40
10184	CA	ASP	B	509	-27.363	22.203	57.188	1.00	44.75
10185	CB	ASP	B	509	-28.127	22.155	55.868	1.00	44.72
10186	CG	ASP	B	509	-28.252	23.510	55.212	1.00	45.91
10187	OD1	ASP	B	509	-27.683	24.497	55.732	1.00	46.23
10188	OD2	ASP	B	509	-28.913	23.679	54.164	1.00	47.63
10189	C	ASP	B	509	-27.936	23.261	58.108	1.00	44.61
10190	O	ASP	B	509	-29.127	23.274	58.374	1.00	44.66

FIGURE 3 GR

A	B	C	D	E	F	G	H	I	J
10191	N	LYS	B	510	-27.072	24.143	58.589	1.00	44.90
10192	CA	LYS	B	510	-27.465	25.188	59.521	1.00	45.59
10193	CB	LYS	B	510	-26.255	26.041	59.907	1.00	45.82
10194	CG	LYS	B	510	-25.350	25.406	60.973	1.00	48.45
10195	CD	LYS	B	510	-24.164	26.314	61.353	1.00	50.98
10196	CE	LYS	B	510	-23.114	25.548	62.160	1.00	54.17
10197	NZ	LYS	B	510	-21.726	26.131	62.006	1.00	56.04
10198	C	LYS	B	510	-28.601	26.078	59.002	1.00	45.45
10199	O	LYS	B	510	-29.243	26.788	59.777	1.00	45.44
10200	N	SER	B	511	-28.847	26.042	57.699	1.00	45.26
10201	CA	SER	B	511	-29.916	26.848	57.118	1.00	45.33
10202	CB	SER	B	511	-29.769	26.907	55.599	1.00	45.41
10203	OG	SER	B	511	-28.785	27.866	55.242	1.00	47.44
10204	C	SER	B	511	-31.302	26.332	57.482	1.00	44.83
10205	O	SER	B	511	-32.235	27.106	57.662	1.00	44.80
10206	N	LYS	B	512	-31.430	25.016	57.606	1.00	44.34
10207	CA	LYS	B	512	-32.727	24.407	57.881	1.00	43.64
10208	CB	LYS	B	512	-32.697	22.921	57.507	1.00	43.69
10209	CG	LYS	B	512	-33.042	22.624	56.053	1.00	45.86
10210	CD	LYS	B	512	-32.208	23.433	55.078	1.00	49.67
10211	CE	LYS	B	512	-32.465	23.007	53.615	1.00	52.34
10212	NZ	LYS	B	512	-33.916	23.051	53.239	1.00	52.55
10213	C	LYS	B	512	-33.176	24.551	59.332	1.00	42.70
10214	O	LYS	B	512	-32.418	24.980	60.200	1.00	42.13
10215	N	LYS	B	513	-34.430	24.187	59.573	1.00	41.79
10216	CA	LYS	B	513	-34.991	24.138	60.913	1.00	40.90
10217	CB	LYS	B	513	-36.204	25.061	61.041	1.00	40.56
10218	CG	LYS	B	513	-35.900	26.538	60.747	1.00	42.83
10219	CD	LYS	B	513	-34.975	27.148	61.804	1.00	44.80
10220	CE	LYS	B	513	-34.335	28.445	61.310	1.00	47.34
10221	NZ	LYS	B	513	-33.346	28.208	60.191	1.00	48.84
10222	C	LYS	B	513	-35.403	22.688	61.160	1.00	39.90
10223	O	LYS	B	513	-36.470	22.255	60.723	1.00	40.55
10224	N	TYR	B	514	-34.559	21.930	61.842	1.00	38.20
10225	CA	TYR	B	514	-34.866	20.529	62.111	1.00	36.29
10226	CB	TYR	B	514	-33.594	19.733	62.310	1.00	36.16
10227	CG	TYR	B	514	-32.702	19.673	61.100	1.00	36.91
10228	CD1	TYR	B	514	-32.789	18.618	60.213	1.00	36.68
10229	CE1	TYR	B	514	-31.979	18.555	59.116	1.00	38.01
10230	CZ	TYR	B	514	-31.049	19.551	58.894	1.00	37.95
10231	OH	TYR	B	514	-30.245	19.466	57.794	1.00	40.53
10232	CE2	TYR	B	514	-30.928	20.610	59.757	1.00	37.42
10233	CD2	TYR	B	514	-31.741	20.667	60.863	1.00	37.50
10234	C	TYR	B	514	-35.681	20.389	63.370	1.00	35.23
10235	O	TYR	B	514	-35.557	21.194	64.295	1.00	34.65
10236	N	PRO	B	515	-36.525	19.371	63.401	1.00	34.07
10237	CA	PRO	B	515	-37.268	19.055	64.613	1.00	33.42
10238	CB	PRO	B	515	-38.158	17.891	64.197	1.00	33.93
10239	CG	PRO	B	515	-38.038	17.776	62.714	1.00	33.47
10240	CD	PRO	B	515	-36.819	18.460	62.287	1.00	33.86
10241	C	PRO	B	515	-36.213	18.584	65.596	1.00	32.62

FIGURE 3 GS

A	B	C	D	E	F	G	H	I	J
10242	O	PRO	B	515	-35.150	18.138	65.180	1.00	31.56
10243	N	LEU	B	516	-36.473	18.708	66.882	1.00	31.86
10244	CA	LEU	B	516	-35.468	18.323	67.834	1.00	31.62
10245	CB	LEU	B	516	-34.798	19.553	68.440	1.00	31.58
10246	CG	LEU	B	516	-33.658	19.190	69.396	1.00	32.56
10247	CD1	LEU	B	516	-34.157	19.079	70.822	1.00	33.59
10248	CD2	LEU	B	516	-32.496	20.191	69.315	1.00	32.53
10249	C	LEU	B	516	-36.059	17.476	68.932	1.00	30.89
10250	O	LEU	B	516	-37.063	17.844	69.537	1.00	31.00
10251	N	LEU	B	517	-35.420	16.345	69.182	1.00	30.15
10252	CA	LEU	B	517	-35.787	15.490	70.293	1.00	29.98
10253	CB	LEU	B	517	-35.843	14.026	69.852	1.00	30.15
10254	CG	LEU	B	517	-36.336	13.035	70.903	1.00	29.99
10255	CD1	LEU	B	517	-36.296	11.620	70.333	1.00	30.41
10256	CD2	LEU	B	517	-37.741	13.368	71.320	1.00	29.68
10257	C	LEU	B	517	-34.748	15.631	71.389	1.00	29.32
10258	O	LEU	B	517	-33.571	15.417	71.150	1.00	29.44
10259	N	LEU	B	518	-35.184	16.005	72.585	1.00	29.05
10260	CA	LEU	B	518	-34.300	16.059	73.734	1.00	28.73
10261	CB	LEU	B	518	-34.741	17.159	74.703	1.00	28.96
10262	CG	LEU	B	518	-33.841	17.523	75.885	1.00	29.85
10263	CD1	LEU	B	518	-32.389	17.709	75.444	1.00	29.17
10264	CD2	LEU	B	518	-34.365	18.774	76.613	1.00	29.61
10265	C	LEU	B	518	-34.346	14.689	74.398	1.00	28.44
10266	O	LEU	B	518	-35.366	14.284	74.941	1.00	28.38
10267	N	ASP	B	519	-33.245	13.955	74.310	1.00	28.13
10268	CA	ASP	B	519	-33.141	12.639	74.920	1.00	27.66
10269	CB	ASP	B	519	-32.203	11.782	74.053	1.00	27.46
10270	CG	ASP	B	519	-31.791	10.492	74.719	1.00	28.03
10271	OD1	ASP	B	519	-31.132	9.700	74.021	1.00	25.81
10272	OD2	ASP	B	519	-32.072	10.188	75.924	1.00	27.65
10273	C	ASP	B	519	-32.558	12.898	76.305	1.00	27.39
10274	O	ASP	B	519	-31.413	13.291	76.423	1.00	27.33
10275	N	VAL	B	520	-33.335	12.683	77.359	1.00	27.69
10276	CA	VAL	B	520	-32.869	13.044	78.687	1.00	27.22
10277	CB	VAL	B	520	-33.750	14.180	79.309	1.00	28.16
10278	CG1	VAL	B	520	-35.117	13.662	79.702	1.00	28.43
10279	CG2	VAL	B	520	-33.916	15.325	78.315	1.00	29.01
10280	C	VAL	B	520	-32.805	11.920	79.676	1.00	26.59
10281	O	VAL	B	520	-33.569	10.970	79.594	1.00	26.43
10282	N	TYR	B	521	-31.841	12.018	80.588	1.00	26.09
10283	CA	TYR	B	521	-31.785	11.154	81.746	1.00	26.06
10284	CB	TYR	B	521	-30.607	10.166	81.703	1.00	26.25
10285	CG	TYR	B	521	-30.722	9.201	82.845	1.00	26.80
10286	CD1	TYR	B	521	-29.919	9.323	83.962	1.00	27.78
10287	CE1	TYR	B	521	-30.055	8.459	85.041	1.00	28.23
10288	CZ	TYR	B	521	-31.026	7.491	85.020	1.00	27.94
10289	OH	TYR	B	521	-31.163	6.653	86.098	1.00	28.80
10290	CE2	TYR	B	521	-31.862	7.369	83.929	1.00	25.85
10291	CD2	TYR	B	521	-31.706	8.225	82.852	1.00	26.01
10292	C	TYR	B	521	-31.747	12.111	82.962	1.00	26.26

FIGURE 3 GT

A	B	C	D	E	F	G	H	I	J
10293	O	TYR	B	521	-32.742	12.272	83.694	1.00	25.89
10294	N	ALA	B	522	-30.606	12.765	83.163	1.00	26.30
10295	CA	ALA	B	522	-30.495	13.860	84.125	1.00	26.18
10296	CB	ALA	B	522	-31.546	14.942	83.835	1.00	25.81
10297	C	ALA	B	522	-30.498	13.539	85.594	1.00	26.17
10298	O	ALA	B	522	-30.602	14.440	86.425	1.00	26.60
10299	N	GLY	B	523	-30.401	12.274	85.937	1.00	26.31
10300	CA	GLY	B	523	-30.338	11.921	87.335	1.00	27.13
10301	C	GLY	B	523	-29.029	12.405	87.919	1.00	27.75
10302	O	GLY	B	523	-28.157	12.886	87.200	1.00	28.22
10303	N	PRO	B	524	-28.886	12.278	89.228	1.00	28.62
10304	CA	PRO	B	524	-27.662	12.695	89.924	1.00	28.81
10305	CB	PRO	B	524	-27.983	12.390	91.385	1.00	28.77
10306	CG	PRO	B	524	-29.455	12.370	91.450	1.00	29.35
10307	CD	PRO	B	524	-29.901	11.744	90.150	1.00	28.51
10308	C	PRO	B	524	-26.425	11.909	89.470	1.00	29.28
10309	O	PRO	B	524	-26.421	10.682	89.522	1.00	30.13
10310	N	CYS	B	525	-25.397	12.631	89.028	1.00	29.43
10311	CA	CYS	B	525	-24.117	12.091	88.536	1.00	29.13
10312	CB	CYS	B	525	-23.443	11.139	89.530	1.00	29.46
10313	SG	CYS	B	525	-21.704	10.843	89.134	1.00	30.55
10314	C	CYS	B	525	-24.244	11.431	87.187	1.00	29.15
10315	O	CYS	B	525	-23.481	10.528	86.845	1.00	28.81
10316	N	SER	B	526	-25.207	11.889	86.398	1.00	28.96
10317	CA	SER	B	526	-25.404	11.293	85.092	1.00	28.33
10318	CB	SER	B	526	-26.889	11.309	84.702	1.00	28.66
10319	OG	SER	B	526	-27.392	12.622	84.545	1.00	28.53
10320	C	SER	B	526	-24.583	12.037	84.075	1.00	28.00
10321	O	SER	B	526	-24.109	13.141	84.343	1.00	28.49
10322	N	GLN	B	527	-24.400	11.407	82.924	1.00	27.24
10323	CA	GLN	B	527	-23.727	11.993	81.789	1.00	27.34
10324	CB	GLN	B	527	-22.260	11.587	81.733	1.00	27.44
10325	CG	GLN	B	527	-21.465	12.350	80.679	1.00	27.08
10326	CD	GLN	B	527	-19.965	12.274	80.926	1.00	29.58
10327	OE1	GLN	B	527	-19.366	11.178	80.858	1.00	31.47
10328	NE2	GLN	B	527	-19.353	13.421	81.239	1.00	25.86
10329	C	GLN	B	527	-24.394	11.465	80.545	1.00	27.56
10330	O	GLN	B	527	-24.386	10.254	80.293	1.00	27.51
10331	N	LYS	B	528	-24.954	12.377	79.769	1.00	27.53
10332	CA	LYS	B	528	-25.605	12.032	78.532	1.00	28.34
10333	CB	LYS	B	528	-27.076	12.468	78.572	1.00	28.03
10334	CG	LYS	B	528	-27.939	11.562	79.420	1.00	26.85
10335	CD	LYS	B	528	-28.288	10.281	78.656	1.00	26.78
10336	CE	LYS	B	528	-29.609	10.442	77.855	1.00	27.00
10337	NZ	LYS	B	528	-29.895	9.276	76.941	1.00	25.88
10338	C	LYS	B	528	-24.887	12.715	77.403	1.00	28.93
10339	O	LYS	B	528	-25.200	12.509	76.242	1.00	29.39
10340	N	ALA	B	529	-23.930	13.554	77.751	1.00	30.32
10341	CA	ALA	B	529	-23.156	14.276	76.752	1.00	31.84
10342	CB	ALA	B	529	-22.910	15.703	77.219	1.00	32.18
10343	C	ALA	B	529	-21.859	13.507	76.669	1.00	32.41

FIGURE 3 GU

A	B	C	D	E	F	G	H	I	J
10344	O	ALA	B	529	-21.059	13.567	77.600	1.00	33.03
10345	N	ASP	B	530	-21.653	12.815	75.549	1.00	32.75
10346	CA	ASP	B	530	-20.595	11.810	75.425	1.00	33.61
10347	CB	ASP	B	530	-21.257	10.422	75.322	1.00	34.27
10348	CG	ASP	B	530	-21.175	9.709	76.570	1.00	36.90
10349	OD1	ASP	B	530	-20.366	10.203	77.388	1.00	42.89
10350	OD2	ASP	B	530	-21.849	8.710	76.862	1.00	38.24
10351	C	ASP	B	530	-19.677	11.829	74.237	1.00	33.01
10352	O	ASP	B	530	-19.952	12.402	73.201	1.00	33.23
10353	N	THR	B	531	-18.634	11.045	74.378	1.00	31.98
10354	CA	THR	B	531	-17.716	10.815	73.309	1.00	31.94
10355	CB	THR	B	531	-16.300	10.963	73.904	1.00	32.42
10356	OG1	THR	B	531	-15.716	12.177	73.405	1.00	32.61
10357	CG2	THR	B	531	-15.397	9.869	73.441	1.00	31.77
10358	C	THR	B	531	-17.994	9.423	72.682	1.00	31.71
10359	O	THR	B	531	-17.361	9.020	71.711	1.00	32.01
10360	N	VAL	B	532	-18.993	8.716	73.209	1.00	31.31
10361	CA	VAL	B	532	-19.307	7.354	72.763	1.00	30.28
10362	CB	VAL	B	532	-20.103	6.599	73.846	1.00	30.52
10363	CG1	VAL	B	532	-20.431	5.169	73.390	1.00	28.75
10364	CG2	VAL	B	532	-19.338	6.602	75.166	1.00	28.66
10365	C	VAL	B	532	-20.057	7.203	71.437	1.00	30.03
10366	O	VAL	B	532	-21.003	7.939	71.145	1.00	29.85
10367	N	PHE	B	533	-19.628	6.225	70.643	1.00	29.69
10368	CA	PHE	B	533	-20.300	5.885	69.393	1.00	29.92
10369	CB	PHE	B	533	-19.333	5.270	68.387	1.00	29.69
10370	CG	PHE	B	533	-20.000	4.842	67.109	1.00	30.85
10371	CD1	PHE	B	533	-20.391	5.783	66.164	1.00	31.21
10372	CE1	PHE	B	533	-21.010	5.391	64.992	1.00	31.70
10373	CZ	PHE	B	533	-21.244	4.055	64.754	1.00	31.59
10374	CE2	PHE	B	533	-20.863	3.119	65.685	1.00	32.15
10375	CD2	PHE	B	533	-20.251	3.511	66.855	1.00	30.29
10376	C	PHE	B	533	-21.438	4.892	69.624	1.00	29.79
10377	O	PHE	B	533	-21.234	3.836	70.234	1.00	29.95
10378	N	ARG	B	534	-22.629	5.217	69.116	1.00	29.94
10379	CA	ARG	B	534	-23.802	4.355	69.313	1.00	29.47
10380	CB	ARG	B	534	-24.746	4.941	70.382	1.00	29.69
10381	CG	ARG	B	534	-24.083	5.232	71.717	1.00	30.30
10382	CD	ARG	B	534	-25.055	5.408	72.882	1.00	30.50
10383	NE	ARG	B	534	-24.534	6.379	73.830	1.00	33.78
10384	CZ	ARG	B	534	-23.814	6.069	74.886	1.00	34.14
10385	NH1	ARG	B	534	-23.566	4.795	75.163	1.00	38.43
10386	NH2	ARG	B	534	-23.360	7.015	75.673	1.00	28.76
10387	C	ARG	B	534	-24.615	4.101	68.052	1.00	29.10
10388	O	ARG	B	534	-24.753	4.958	67.182	1.00	28.45
10389	N	LEU	B	535	-25.160	2.897	67.971	1.00	28.76
10390	CA	LEU	B	535	-26.099	2.562	66.924	1.00	28.27
10391	CB	LEU	B	535	-25.647	1.339	66.162	1.00	27.84
10392	CG	LEU	B	535	-24.323	1.513	65.428	1.00	28.86
10393	CD1	LEU	B	535	-23.984	0.272	64.628	1.00	27.87
10394	CD2	LEU	B	535	-24.397	2.736	64.523	1.00	28.04



FIGURE 3 GV

A	B	C	D	E	F	G	H	I	J
10395	C	LEU	B	535	-27.354	2.269	67.707	1.00	28.36
10396	O	LEU	B	535	-27.497	1.183	68.281	1.00	28.59
10397	N	ASN	B	536	-28.239	3.258	67.771	1.00	27.55
10398	CA	ASN	B	536	-29.443	3.159	68.578	1.00	27.33
10399	CB	ASN	B	536	-29.183	3.733	69.983	1.00	27.21
10400	CG	ASN	B	536	-28.799	5.208	69.946	1.00	26.48
10401	OD1	ASN	B	536	-28.718	5.803	68.880	1.00	26.35
10402	ND2	ASN	B	536	-28.564	5.800	71.113	1.00	25.63
10403	C	ASN	B	536	-30.620	3.883	67.953	1.00	27.21
10404	O	ASN	B	536	-30.562	4.331	66.817	1.00	27.61
10405	N	TRP	B	537	-31.698	4.006	68.706	1.00	27.52
10406	CA	TRP	B	537	-32.875	4.680	68.190	1.00	27.56
10407	CB	TRP	B	537	-33.956	4.692	69.254	1.00	27.37
10408	CG	TRP	B	537	-35.300	5.118	68.741	1.00	26.25
10409	CD1	TRP	B	537	-35.942	4.662	67.625	1.00	25.40
10410	NE1	TRP	B	537	-37.153	5.291	67.485	1.00	24.25
10411	CE2	TRP	B	537	-37.318	6.163	68.524	1.00	24.30
10412	CD2	TRP	B	537	-36.158	6.078	69.333	1.00	25.96
10413	CE3	TRP	B	537	-36.078	6.880	70.487	1.00	24.95
10414	CZ3	TRP	B	537	-37.135	7.719	70.782	1.00	23.71
10415	CH2	TRP	B	537	-38.275	7.768	69.953	1.00	24.08
10416	CE2	TRP	B	537	-38.382	6.994	68.828	1.00	22.33
10417	C	TRP	B	537	-32.542	6.113	67.731	1.00	27.79
10418	O	TRP	B	537	-33.000	6.557	66.687	1.00	28.32
10419	N	ALA	B	538	-31.727	6.829	68.498	1.00	27.68
10420	CA	ALA	B	538	-31.332	8.186	68.094	1.00	27.27
10421	CB	ALA	B	538	-30.361	8.803	69.110	1.00	26.36
10422	C	ALA	B	538	-30.701	8.143	66.714	1.00	27.27
10423	O	ALA	B	538	-30.956	8.991	65.878	1.00	27.73
10424	N	THR	B	539	-29.882	7.138	66.456	1.00	27.11
10425	CA	THR	B	539	-29.237	7.056	65.158	1.00	27.29
10426	CB	THR	B	539	-28.390	5.777	65.095	1.00	27.30
10427	OG1	THR	B	539	-27.573	5.698	66.270	1.00	27.43
10428	CG2	THR	B	539	-27.383	5.866	63.962	1.00	26.66
10429	C	THR	B	539	-30.253	7.059	64.013	1.00	27.41
10430	O	THR	B	539	-30.097	7.794	63.041	1.00	28.14
10431	N	TYR	B	540	-31.270	6.202	64.121	1.00	27.11
10432	CA	TYR	B	540	-32.339	6.125	63.122	1.00	26.32
10433	CB	TYR	B	540	-33.311	4.961	63.466	1.00	25.83
10434	CG	TYR	B	540	-34.783	5.253	63.168	1.00	24.15
10435	CD1	TYR	B	540	-35.706	5.430	64.193	1.00	22.96
10436	CE1	TYR	B	540	-37.043	5.678	63.919	1.00	22.68
10437	CZ	TYR	B	540	-37.464	5.787	62.608	1.00	23.79
10438	OH	TYR	B	540	-38.765	6.064	62.302	1.00	23.93
10439	CE2	TYR	B	540	-36.568	5.643	61.577	1.00	25.15
10440	CD2	TYR	B	540	-35.228	5.376	61.864	1.00	23.64
10441	C	TYR	B	540	-33.107	7.447	62.980	1.00	26.37
10442	O	TYR	B	540	-33.390	7.891	61.871	1.00	26.82
10443	N	LEU	B	541	-33.455	8.067	64.105	1.00	26.28
10444	CA	LEU	B	541	-34.247	9.293	64.091	1.00	26.66
10445	CB	LEU	B	541	-34.497	9.784	65.513	1.00	26.15

FIGURE 3 GW

A	B	C	D	E	F	G	H	I	J
10446	CG	LEU	B	541	-35.466	9.000	66.378	1.00	26.10
10447	CD1	LEU	B	541	-35.727	9.782	67.649	1.00	26.75
10448	CD2	LEU	B	541	-36.758	8.750	65.620	1.00	25.54
10449	C	LEU	B	541	-33.578	10.405	63.299	1.00	27.47
10450	O	LEU	B	541	-34.229	11.154	62.571	1.00	27.24
10451	N	ALA	B	542	-32.268	10.518	63.466	1.00	28.12
10452	CA	ALA	B	542	-31.500	11.526	62.769	1.00	29.58
10453	CB	ALA	B	542	-30.172	11.751	63.478	1.00	29.49
10454	C	ALA	B	542	-31.261	11.144	61.325	1.00	30.14
10455	O	ALA	B	542	-31.455	11.962	60.423	1.00	30.83
10456	N	SER	B	543	-30.869	9.891	61.114	1.00	30.58
10457	CA	SER	B	543	-30.534	9.403	59.784	1.00	30.83
10458	CB	SER	B	543	-29.899	8.028	59.867	1.00	30.44
10459	OG	SER	B	543	-29.501	7.617	58.576	1.00	31.51
10460	C	SER	B	543	-31.668	9.326	58.797	1.00	31.21
10461	O	SER	B	543	-31.550	9.789	57.670	1.00	31.31
10462	N	THR	B	544	-32.759	8.687	59.205	1.00	32.02
10463	CA	THR	B	544	-33.885	8.473	58.308	1.00	31.66
10464	CB	THR	B	544	-34.515	7.100	58.611	1.00	32.14
10465	OG1	THR	B	544	-33.545	6.064	58.384	1.00	32.56
10466	CG2	THR	B	544	-35.623	6.774	57.635	1.00	31.12
10467	C	THR	B	544	-34.930	9.559	58.428	1.00	31.54
10468	O	THR	B	544	-35.516	9.973	57.428	1.00	32.90
10469	N	GLU	B	545	-35.171	10.028	59.645	1.00	30.93
10470	CA	GLU	B	545	-36.245	10.990	59.883	1.00	30.44
10471	CB	GLU	B	545	-37.056	10.607	61.121	1.00	30.22
10472	CG	GLU	B	545	-37.476	9.154	61.168	1.00	31.17
10473	CD	GLU	B	545	-38.478	8.816	60.102	1.00	31.65
10474	OE1	GLU	B	545	-38.805	7.626	59.945	1.00	33.03
10475	OE2	GLU	B	545	-38.948	9.745	59.428	1.00	33.96
10476	C	GLU	B	545	-35.803	12.436	60.017	1.00	30.28
10477	O	GLU	B	545	-36.647	13.314	60.231	1.00	29.86
10478	N	ASN	B	546	-34.497	12.671	59.906	1.00	29.77
10479	CA	ASN	B	546	-33.925	14.024	59.972	1.00	29.94
10480	CB	ASN	B	546	-34.234	14.834	58.725	1.00	29.97
10481	CG	ASN	B	546	-33.620	14.232	57.488	1.00	31.87
10482	OD1	ASN	B	546	-34.321	13.778	56.591	1.00	33.83
10483	ND2	ASN	B	546	-32.299	14.218	57.434	1.00	35.28
10484	C	ASN	B	546	-34.281	14.807	61.213	1.00	29.50
10485	O	ASN	B	546	-34.498	16.019	61.169	1.00	30.14
10486	N	ILE	B	547	-34.333	14.100	62.326	1.00	29.19
10487	CA	ILE	B	547	-34.577	14.721	63.609	1.00	28.81
10488	CB	ILE	B	547	-35.426	13.787	64.492	1.00	28.59
10489	CG1	ILE	B	547	-36.751	13.460	63.803	1.00	26.88
10490	CD1	ILE	B	547	-37.627	12.520	64.592	1.00	25.63
10491	CG2	ILE	B	547	-35.654	14.432	65.856	1.00	26.86
10492	C	ILE	B	547	-33.225	14.903	64.264	1.00	28.95
10493	O	ILE	B	547	-32.350	14.055	64.125	1.00	29.39
10494	N	ILE	B	548	-33.032	16.009	64.960	1.00	29.52
10495	CA	ILE	B	548	-31.813	16.163	65.719	1.00	29.91
10496	CB	ILE	B	548	-31.404	17.636	65.803	1.00	30.67

FIGURE 3 GX

A	B	C	D	E	F	G	H	I	J
10497	CG1	ILE	B	548	-31.059	18.186	64.416	1.00	31.31
10498	CD1	ILE	B	548	-30.815	19.719	64.396	1.00	32.35
10499	CG2	ILE	B	548	-30.218	17.811	66.750	1.00	29.86
10500	C	ILE	B	548	-32.144	15.633	67.093	1.00	29.97
10501	O	ILE	B	548	-33.183	15.963	67.645	1.00	30.56
10502	N	VAL	B	549	-31.303	14.770	67.642	1.00	30.13
10503	CA	VAL	B	549	-31.552	14.325	68.995	1.00	30.10
10504	CB	VAL	B	549	-31.926	12.818	69.104	1.00	30.19
10505	CG1	VAL	B	549	-31.532	12.071	67.867	1.00	31.17
10506	CG2	VAL	B	549	-31.387	12.201	70.375	1.00	29.16
10507	C	VAL	B	549	-30.419	14.746	69.899	1.00	30.23
10508	O	VAL	B	549	-29.253	14.390	69.700	1.00	30.38
10509	N	ALA	B	550	-30.788	15.535	70.894	1.00	30.33
10510	CA	ALA	B	550	-29.828	16.148	71.775	1.00	30.46
10511	CB	ALA	B	550	-30.010	17.661	71.769	1.00	30.64
10512	C	ALA	B	550	-29.939	15.652	73.177	1.00	30.61
10513	O	ALA	B	550	-30.982	15.179	73.619	1.00	30.50
10514	N	SER	B	551	-28.834	15.772	73.889	1.00	31.06
10515	CA	SER	B	551	-28.846	15.444	75.286	1.00	31.88
10516	CB	SER	B	551	-28.313	14.033	75.517	1.00	31.90
10517	OG	SER	B	551	-28.920	13.138	74.581	1.00	31.37
10518	C	SER	B	551	-28.035	16.516	75.969	1.00	32.32
10519	O	SER	B	551	-27.148	17.120	75.368	1.00	32.04
10520	N	PHE	B	552	-28.363	16.760	77.231	1.00	32.70
10521	CA	PHE	B	552	-27.749	17.840	77.955	1.00	32.31
10522	CB	PHE	B	552	-28.668	19.055	77.881	1.00	32.17
10523	CG	PHE	B	552	-28.124	20.257	78.572	1.00	32.00
10524	CD1	PHE	B	552	-27.188	21.067	77.939	1.00	32.75
10525	CE1	PHE	B	552	-26.670	22.170	78.575	1.00	31.83
10526	CZ	PHE	B	552	-27.080	22.476	79.847	1.00	30.43
10527	CE2	PHE	B	552	-28.010	21.672	80.490	1.00	32.93
10528	CD2	PHE	B	552	-28.528	20.573	79.852	1.00	30.89
10529	C	PHE	B	552	-27.508	17.453	79.401	1.00	32.19
10530	O	PHE	B	552	-28.389	16.917	80.075	1.00	32.10
10531	N	ASP	B	553	-26.293	17.702	79.862	1.00	32.28
10532	CA	ASP	B	553	-25.929	17.440	81.244	1.00	32.29
10533	CB	ASP	B	553	-24.550	16.815	81.336	1.00	32.17
10534	CG	ASP	B	553	-24.469	15.471	80.649	1.00	32.77
10535	OD1	ASP	B	553	-25.436	14.686	80.753	1.00	32.37
10536	OD2	ASP	B	553	-23.471	15.114	79.983	1.00	33.13
10537	C	ASP	B	553	-25.939	18.777	81.963	1.00	32.26
10538	O	ASP	B	553	-25.033	19.601	81.802	1.00	32.17
10539	N	GLY	B	554	-26.985	19.010	82.732	1.00	31.93
10540	CA	GLY	B	554	-27.085	20.260	83.448	1.00	32.51
10541	C	GLY	B	554	-26.731	20.065	84.900	1.00	32.51
10542	O	GLY	B	554	-25.998	19.146	85.268	1.00	31.81
10543	N	ARG	B	555	-27.235	20.946	85.746	1.00	32.88
10544	CA	ARG	B	555	-26.933	20.781	87.146	1.00	33.51
10545	CB	ARG	B	555	-27.632	21.834	87.979	1.00	33.65
10546	CG	ARG	B	555	-26.887	23.165	87.886	1.00	35.20
10547	CD	ARG	B	555	-27.614	24.317	88.459	1.00	35.52

FIGURE 3 GY

A	B	C	D	E	F	G	H	I	J
10548	NE	ARG	B	555	-28.703	24.722	87.584	1.00	36.97
10549	CZ	ARG	B	555	-29.567	25.663	87.907	1.00	36.91
10550	NH1	ARG	B	555	-29.435	26.274	89.082	1.00	35.24
10551	NH2	ARG	B	555	-30.544	25.998	87.065	1.00	35.09
10552	C	ARG	B	555	-27.318	19.374	87.515	1.00	33.51
10553	O	ARG	B	555	-28.183	18.759	86.856	1.00	33.65
10554	N	GLY	B	556	-26.640	18.845	88.526	1.00	33.18
10555	CA	GLY	B	556	-26.839	17.473	88.946	1.00	32.38
10556	C	GLY	B	556	-25.990	16.476	88.169	1.00	32.39
10557	O	GLY	B	556	-25.766	15.373	88.644	1.00	32.12
10558	N	SER	B	557	-25.513	16.843	86.981	1.00	32.66
10559	CA	SER	B	557	-24.705	15.901	86.198	1.00	33.46
10560	CB	SER	B	557	-24.502	16.376	84.760	1.00	33.48
10561	OG	SER	B	557	-24.336	17.779	84.695	1.00	36.23
10562	C	SER	B	557	-23.372	15.544	86.871	1.00	32.98
10563	O	SER	B	557	-22.917	16.247	87.775	1.00	33.03
10564	N	GLY	B	558	-22.754	14.448	86.433	1.00	32.64
10565	CA	GLY	B	558	-21.533	13.973	87.058	1.00	31.98
10566	C	GLY	B	558	-20.212	14.257	86.369	1.00	31.63
10567	O	GLY	B	558	-20.162	14.804	85.272	1.00	30.81
10568	N	TYR	B	559	-19.122	13.907	87.051	1.00	32.06
10569	CA	TYR	B	559	-17.795	13.984	86.445	1.00	32.31
10570	CB	TYR	B	559	-17.816	13.166	85.150	1.00	31.85
10571	CG	TYR	B	559	-18.466	11.824	85.389	1.00	31.91
10572	CD1	TYR	B	559	-19.691	11.486	84.793	1.00	31.67
10573	CE1	TYR	B	559	-20.290	10.252	85.038	1.00	31.06
10574	CZ	TYR	B	559	-19.671	9.361	85.896	1.00	31.51
10575	OH	TYR	B	559	-20.234	8.141	86.176	1.00	29.87
10576	CE2	TYR	B	559	-18.474	9.695	86.507	1.00	32.01
10577	CD2	TYR	B	559	-17.887	10.918	86.251	1.00	30.62
10578	C	TYR	B	559	-17.313	15.415	86.184	1.00	32.86
10579	O	TYR	B	559	-16.400	15.627	85.384	1.00	33.13
10580	N	GLN	B	560	-17.931	16.392	86.843	1.00	33.01
10581	CA	GLN	B	560	-17.527	17.777	86.663	1.00	33.99
10582	CB	GLN	B	560	-18.528	18.546	85.815	1.00	34.05
10583	CG	GLN	B	560	-18.688	18.047	84.421	1.00	34.49
10584	CD	GLN	B	560	-20.057	18.380	83.874	1.00	35.71
10585	OE1	GLN	B	560	-20.234	19.389	83.187	1.00	36.71
10586	NE2	GLN	B	560	-21.034	17.543	84.190	1.00	35.92
10587	C	GLN	B	560	-17.337	18.507	87.971	1.00	34.22
10588	O	GLN	B	560	-17.092	19.703	87.973	1.00	34.78
10589	N	GLY	B	561	-17.433	17.788	89.082	1.00	34.69
10590	CA	GLY	B	561	-17.258	18.397	90.381	1.00	34.77
10591	C	GLY	B	561	-18.543	18.417	91.179	1.00	35.33
10592	O	GLY	B	561	-19.642	18.421	90.607	1.00	35.93
10593	N	ASP	B	562	-18.396	18.398	92.500	1.00	35.27
10594	CA	ASP	B	562	-19.506	18.442	93.425	1.00	35.86
10595	CB	ASP	B	562	-18.993	18.303	94.866	1.00	35.66
10596	CG	ASP	B	562	-18.734	16.849	95.272	1.00	37.04
10597	OD1	ASP	B	562	-18.796	15.958	94.392	1.00	38.30
10598	OD2	ASP	B	562	-18.478	16.489	96.456	1.00	37.08

FIGURE 3 GZ

A	B	C	D	E	F	G	H	I	J
10599	C	ASP	B	562	-20.319	19.736	93.257	1.00	36.45
10600	O	ASP	B	562	-21.482	19.807	93.643	1.00	36.43
10601	N	LYS	B	563	-19.723	20.760	92.661	1.00	37.15
10602	CA	LYS	B	563	-20.461	22.004	92.485	1.00	37.86
10603	CB	LYS	B	563	-19.570	23.108	91.925	1.00	37.97
10604	CG	LYS	B	563	-20.311	24.262	91.289	1.00	40.44
10605	CD	LYS	B	563	-21.242	24.999	92.266	1.00	44.52
10606	CE	LYS	B	563	-21.799	26.278	91.615	1.00	46.39
10607	NZ	LYS	B	563	-23.034	26.785	92.282	1.00	48.60
10608	C	LYS	B	563	-21.674	21.750	91.600	1.00	37.60
10609	O	LYS	B	563	-22.795	22.130	91.937	1.00	37.35
10610	N	ILE	B	564	-21.441	21.095	90.473	1.00	37.54
10611	CA	ILE	B	564	-22.521	20.740	89.574	1.00	36.89
10612	CB	ILE	B	564	-21.958	20.391	88.203	1.00	37.38
10613	CG1	ILE	B	564	-21.528	21.665	87.475	1.00	36.18
10614	CD1	ILE	B	564	-20.505	21.393	86.420	1.00	37.37
10615	CG2	ILE	B	564	-22.990	19.622	87.382	1.00	36.46
10616	C	ILE	B	564	-23.328	19.570	90.135	1.00	36.51
10617	O	ILE	B	564	-24.539	19.668	90.286	1.00	36.37
10618	N	MET	B	565	-22.649	18.492	90.509	1.00	35.66
10619	CA	MET	B	565	-23.346	17.291	90.945	1.00	35.05
10620	CB	MET	B	565	-22.362	16.141	91.183	1.00	35.47
10621	CG	MET	B	565	-23.040	14.771	91.292	1.00	34.19
10622	SD	MET	B	565	-21.862	13.428	91.484	1.00	33.63
10623	CE	MET	B	565	-21.356	13.686	93.122	1.00	32.47
10624	C	MET	B	565	-24.221	17.446	92.176	1.00	35.16
10625	O	MET	B	565	-25.284	16.843	92.252	1.00	34.87
10626	N	HIS	B	566	-23.783	18.235	93.151	1.00	35.16
10627	CA	HIS	B	566	-24.552	18.368	94.387	1.00	35.53
10628	CB	HIS	B	566	-23.617	18.551	95.591	1.00	35.78
10629	CG	HIS	B	566	-22.923	17.293	96.018	1.00	38.07
10630	ND1	HIS	B	566	-23.198	16.063	95.456	1.00	39.45
10631	CE1	HIS	B	566	-22.451	15.140	96.038	1.00	39.87
10632	NE2	HIS	B	566	-21.704	15.726	96.959	1.00	39.19
10633	CD2	HIS	B	566	-21.982	17.071	96.968	1.00	38.79
10634	C	HIS	B	566	-25.609	19.480	94.351	1.00	35.11
10635	O	HIS	B	566	-26.342	19.695	95.320	1.00	35.67
10636	N	ALA	B	567	-25.701	20.193	93.245	1.00	34.61
10637	CA	ALA	B	567	-26.676	21.273	93.166	1.00	34.81
10638	CB	ALA	B	567	-26.582	21.946	91.832	1.00	34.30
10639	C	ALA	B	567	-28.129	20.828	93.455	1.00	35.03
10640	O	ALA	B	567	-28.921	21.603	93.973	1.00	35.23
10641	N	ILE	B	568	-28.464	19.577	93.149	1.00	34.76
10642	CA	ILE	B	568	-29.834	19.098	93.279	1.00	34.48
10643	CB	ILE	B	568	-30.242	18.257	92.020	1.00	34.57
10644	CG1	ILE	B	568	-29.180	17.203	91.676	1.00	33.61
10645	CD1	ILE	B	568	-28.959	16.175	92.728	1.00	34.77
10646	CG2	ILE	B	568	-30.396	19.155	90.803	1.00	32.25
10647	C	ILE	B	568	-30.056	18.319	94.565	1.00	35.25
10648	O	ILE	B	568	-31.076	17.649	94.730	1.00	35.69
10649	N	ASN	B	569	-29.093	18.413	95.472	1.00	35.41

FIGURE 3 HA

A	B	C	D	E	F	G	H	I	J
10650	CA	ASN	B	569	-29.154	17.734	96.759	1.00	36.04
10651	CB	ASN	B	569	-27.907	18.065	97.590	1.00	36.33
10652	CG	ASN	B	569	-27.894	17.371	98.934	1.00	37.79
10653	OD1	ASN	B	569	-27.682	18.013	99.962	1.00	42.19
10654	ND2	ASN	B	569	-28.108	16.061	98.943	1.00	37.45
10655	C	ASN	B	569	-30.413	18.126	97.504	1.00	36.25
10656	O	ASN	B	569	-30.705	19.311	97.643	1.00	36.62
10657	N	ARG	B	570	-31.169	17.123	97.952	1.00	36.24
10658	CA	ARG	B	570	-32.410	17.337	98.682	1.00	36.46
10659	CB	ARG	B	570	-32.151	18.128	99.973	1.00	36.84
10660	CG	ARG	B	570	-31.252	17.434	101.001	1.00	37.76
10661	CD	ARG	B	570	-31.041	18.262	102.276	1.00	40.27
10662	NE	ARG	B	570	-32.317	18.656	102.880	1.00	40.70
10663	CZ	ARG	B	570	-32.968	17.917	103.763	1.00	40.23
10664	NH1	ARG	B	570	-32.459	16.754	104.151	1.00	39.98
10665	NH2	ARG	B	570	-34.125	18.336	104.258	1.00	40.21
10666	C	ARG	B	570	-33.459	18.052	97.837	1.00	36.25
10667	O	ARG	B	570	-34.534	18.389	98.325	1.00	35.95
10668	N	ARG	B	571	-33.159	18.258	96.560	1.00	36.43
10669	CA	ARG	B	571	-34.050	19.022	95.702	1.00	36.27
10670	CB	ARG	B	571	-33.518	20.446	95.568	1.00	37.14
10671	CG	ARG	B	571	-34.595	21.519	95.634	1.00	40.76
10672	CD	ARG	B	571	-34.789	22.148	97.013	1.00	44.21
10673	NE	ARG	B	571	-35.108	21.171	98.043	1.00	45.29
10674	CZ	ARG	B	571	-35.243	21.471	99.330	1.00	46.29
10675	NH1	ARG	B	571	-35.531	20.517	100.218	1.00	44.37
10676	NH2	ARG	B	571	-35.081	22.726	99.730	1.00	46.11
10677	C	ARG	B	571	-34.207	18.388	94.327	1.00	35.45
10678	O	ARG	B	571	-34.071	19.048	93.298	1.00	35.23
10679	N	LEU	B	572	-34.481	17.091	94.307	1.00	35.01
10680	CA	LEU	B	572	-34.735	16.401	93.045	1.00	34.53
10681	CB	LEU	B	572	-34.969	14.913	93.293	1.00	34.67
10682	CG	LEU	B	572	-33.819	13.949	93.040	1.00	34.88
10683	CD1	LEU	B	572	-33.944	12.764	93.977	1.00	34.07
10684	CD2	LEU	B	572	-32.479	14.628	93.169	1.00	33.53
10685	C	LEU	B	572	-35.977	16.984	92.389	1.00	33.75
10686	O	LEU	B	572	-36.930	17.368	93.062	1.00	33.76
10687	N	GLY	B	573	-35.964	17.065	91.073	1.00	32.83
10688	CA	GLY	B	573	-37.100	17.588	90.353	1.00	32.59
10689	C	GLY	B	573	-37.106	19.087	90.209	1.00	32.24
10690	O	GLY	B	573	-38.161	19.662	89.947	1.00	32.58
10691	N	THR	B	574	-35.954	19.728	90.375	1.00	31.52
10692	CA	THR	B	574	-35.867	21.193	90.230	1.00	31.33
10693	CB	THR	B	574	-35.477	21.880	91.591	1.00	31.68
10694	OG1	THR	B	574	-34.339	21.214	92.153	1.00	29.87
10695	CG2	THR	B	574	-36.555	21.646	92.658	1.00	30.59
10696	C	THR	B	574	-34.902	21.659	89.136	1.00	31.34
10697	O	THR	B	574	-35.268	21.766	87.971	1.00	30.98
10698	N	PHE	B	575	-33.661	21.931	89.531	1.00	31.94
10699	CA	PHE	B	575	-32.640	22.450	88.621	1.00	32.58
10700	CB	PHE	B	575	-31.329	22.632	89.387	1.00	32.81

FIGURE 3 HB

A	B	C	D	E	F	G	H	I	J
10701	CG	PHE	B	575	-31.386	23.712	90.438	1.00	33.47
10702	CD1	PHE	B	575	-32.083	24.893	90.204	1.00	34.26
10703	CE1	PHE	B	575	-32.127	25.899	91.155	1.00	34.50
10704	CZ	PHE	B	575	-31.479	25.732	92.374	1.00	34.35
10705	CE2	PHE	B	575	-30.793	24.557	92.627	1.00	35.05
10706	CD2	PHE	B	575	-30.747	23.551	91.656	1.00	34.35
10707	C	PHE	B	575	-32.438	21.579	87.374	1.00	33.10
10708	O	PHE	B	575	-32.447	22.076	86.240	1.00	33.70
10709	N	GLU	B	576	-32.223	20.288	87.609	1.00	32.96
10710	CA	GLU	B	576	-32.090	19.264	86.576	1.00	33.38
10711	CB	GLU	B	576	-32.298	17.936	87.279	1.00	33.76
10712	CG	GLU	B	576	-33.338	18.161	88.384	1.00	36.02
10713	CD	GLU	B	576	-33.855	16.885	88.957	1.00	38.90
10714	OE1	GLU	B	576	-33.478	15.815	88.461	1.00	40.73
10715	OE2	GLU	B	576	-34.625	16.950	89.918	1.00	43.20
10716	C	GLU	B	576	-33.210	19.390	85.559	1.00	32.87
10717	O	GLU	B	576	-32.994	19.354	84.354	1.00	32.82
10718	N	VAL	B	577	-34.430	19.496	86.067	1.00	32.68
10719	CA	VAL	B	577	-35.588	19.679	85.225	1.00	32.75
10720	CB	VAL	B	577	-36.880	19.669	86.074	1.00	32.71
10721	CG1	VAL	B	577	-37.068	18.331	86.760	1.00	33.07
10722	CG2	VAL	B	577	-38.082	19.995	85.235	1.00	31.84
10723	C	VAL	B	577	-35.436	21.032	84.533	1.00	33.08
10724	O	VAL	B	577	-35.497	21.124	83.315	1.00	32.79
10725	N	GLU	B	578	-35.194	22.077	85.325	1.00	33.64
10726	CA	GLU	B	578	-35.077	23.436	84.793	1.00	34.20
10727	CB	GLU	B	578	-34.875	24.444	85.931	1.00	34.96
10728	CG	GLU	B	578	-36.095	24.555	86.849	1.00	38.55
10729	CD	GLU	B	578	-35.791	25.183	88.209	1.00	43.37
10730	OE1	GLU	B	578	-36.143	24.559	89.232	1.00	45.40
10731	OE2	GLU	B	578	-35.214	26.296	88.269	1.00	44.63
10732	C	GLU	B	578	-33.992	23.575	83.740	1.00	33.39
10733	O	GLU	B	578	-34.157	24.326	82.789	1.00	33.04
10734	N	ASP	B	579	-32.904	22.816	83.881	1.00	33.17
10735	CA	ASP	B	579	-31.781	22.940	82.952	1.00	32.69
10736	CB	ASP	B	579	-30.491	22.411	83.587	1.00	33.66
10737	CG	ASP	B	579	-29.996	23.282	84.751	1.00	34.52
10738	OD1	ASP	B	579	-30.589	24.347	85.036	1.00	35.69
10739	OD2	ASP	B	579	-29.012	22.975	85.449	1.00	37.32
10740	C	ASP	B	579	-32.040	22.329	81.566	1.00	32.13
10741	O	ASP	B	579	-31.517	22.815	80.568	1.00	32.02
10742	N	GLN	B	580	-32.852	21.272	81.498	1.00	31.39
10743	CA	GLN	B	580	-33.224	20.686	80.208	1.00	30.77
10744	CB	GLN	B	580	-33.987	19.364	80.402	1.00	30.25
10745	CG	GLN	B	580	-33.192	18.302	81.128	1.00	28.35
10746	CD	GLN	B	580	-32.087	17.731	80.274	1.00	25.57
10747	OE1	GLN	B	580	-32.331	17.356	79.135	1.00	26.87
10748	NE2	GLN	B	580	-30.874	17.673	80.811	1.00	22.34
10749	C	GLN	B	580	-34.096	21.661	79.425	1.00	31.03
10750	O	GLN	B	580	-33.985	21.772	78.213	1.00	31.52
10751	N	ILE	B	581	-34.991	22.360	80.110	1.00	31.20

FIGURE 3 HC

A	B	C	D	E	F	G	H	I	J
10752	CA	ILE	B	581	-35.801	23.342	79.417	1.00	31.85
10753	CB	ILE	B	581	-36.861	23.940	80.365	1.00	32.05
10754	CG1	ILE	B	581	-37.834	22.858	80.832	1.00	31.00
10755	CD1	ILE	B	581	-38.632	23.258	82.037	1.00	30.97
10756	CG2	ILE	B	581	-37.597	25.053	79.678	1.00	30.17
10757	C	ILE	B	581	-34.891	24.446	78.870	1.00	32.71
10758	O	ILE	B	581	-34.969	24.809	77.701	1.00	33.46
10759	N	GLU	B	582	-34.012	24.966	79.723	1.00	33.21
10760	CA	GLU	B	582	-33.097	26.018	79.315	1.00	33.79
10761	CB	GLU	B	582	-32.262	26.491	80.517	1.00	34.12
10762	CG	GLU	B	582	-31.310	27.651	80.234	1.00	36.22
10763	CD	GLU	B	582	-32.004	28.887	79.664	1.00	39.46
10764	OE1	GLU	B	582	-31.339	29.644	78.914	1.00	40.85
10765	OE2	GLU	B	582	-33.204	29.105	79.959	1.00	39.16
10766	C	GLU	B	582	-32.216	25.536	78.160	1.00	33.82
10767	O	GLU	B	582	-31.911	26.296	77.252	1.00	33.39
10768	N	ALA	B	583	-31.827	24.264	78.195	1.00	33.90
10769	CA	ALA	B	583	-31.024	23.688	77.123	1.00	34.37
10770	CB	ALA	B	583	-30.724	22.211	77.411	1.00	33.98
10771	C	ALA	B	583	-31.757	23.810	75.803	1.00	34.95
10772	O	ALA	B	583	-31.205	24.290	74.824	1.00	35.07
10773	N	ALA	B	584	-33.011	23.366	75.797	1.00	35.74
10774	CA	ALA	B	584	-33.850	23.412	74.607	1.00	36.83
10775	CB	ALA	B	584	-35.240	22.854	74.916	1.00	36.57
10776	C	ALA	B	584	-33.966	24.826	74.068	1.00	37.33
10777	O	ALA	B	584	-33.833	25.049	72.865	1.00	37.77
10778	N	ARG	B	585	-34.243	25.774	74.954	1.00	38.17
10779	CA	ARG	B	585	-34.320	27.180	74.561	1.00	39.25
10780	CB	ARG	B	585	-34.476	28.072	75.792	1.00	38.94
10781	CG	ARG	B	585	-35.733	27.835	76.597	1.00	39.58
10782	CD	ARG	B	585	-36.191	29.063	77.366	1.00	40.42
10783	NE	ARG	B	585	-36.713	28.721	78.685	1.00	41.24
10784	CZ	ARG	B	585	-37.988	28.809	79.028	1.00	42.41
10785	NH1	ARG	B	585	-38.892	29.226	78.145	1.00	43.90
10786	NH2	ARG	B	585	-38.367	28.480	80.255	1.00	42.34
10787	C	ARG	B	585	-33.040	27.585	73.835	1.00	39.97
10788	O	ARG	B	585	-33.074	28.246	72.788	1.00	40.01
10789	N	GLN	B	586	-31.910	27.184	74.416	1.00	40.89
10790	CA	GLN	B	586	-30.606	27.495	73.865	1.00	41.76
10791	CB	GLN	B	586	-29.514	27.026	74.826	1.00	41.88
10792	CG	GLN	B	586	-29.546	27.743	76.154	1.00	44.21
10793	CD	GLN	B	586	-29.185	29.209	76.023	1.00	48.06
10794	OE1	GLN	B	586	-28.453	29.581	75.106	1.00	49.53
10795	NE2	GLN	B	586	-29.688	30.047	76.941	1.00	48.56
10796	C	GLN	B	586	-30.466	26.822	72.516	1.00	41.89
10797	O	GLN	B	586	-30.032	27.439	71.542	1.00	41.76
10798	N	PHE	B	587	-30.839	25.546	72.453	1.00	42.18
10799	CA	PHE	B	587	-30.792	24.845	71.181	1.00	42.60
10800	CB	PHE	B	587	-31.264	23.404	71.333	1.00	42.25
10801	CG	PHE	B	587	-30.377	22.576	72.206	1.00	43.51
10802	CD1	PHE	B	587	-29.069	22.966	72.452	1.00	44.12



FIGURE 3 HD

A	B	C	D	E	F	G	H	I	J
10803	CE1	PHE	B	587	-28.242	22.209	73.266	1.00	44.69
10804	CZ	PHE	B	587	-28.719	21.058	73.847	1.00	43.72
10805	CE2	PHE	B	587	-30.026	20.664	73.616	1.00	44.68
10806	CD2	PHE	B	587	-30.847	21.415	72.797	1.00	42.78
10807	C	PHE	B	587	-31.587	25.605	70.101	1.00	42.70
10808	O	PHE	B	587	-31.130	25.726	68.971	1.00	42.70
10809	N	SER	B	588	-32.766	26.120	70.430	1.00	43.04
10810	CA	SER	B	588	-33.493	26.881	69.415	1.00	44.12
10811	CB	SER	B	588	-34.931	27.233	69.838	1.00	43.98
10812	OG	SER	B	588	-35.115	27.130	71.241	1.00	44.78
10813	C	SER	B	588	-32.717	28.125	69.020	1.00	44.46
10814	O	SER	B	588	-32.516	28.385	67.841	1.00	44.86
10815	N	LYS	B	589	-32.254	28.891	69.997	1.00	44.92
10816	CA	LYS	B	589	-31.522	30.106	69.670	1.00	45.30
10817	CB	LYS	B	589	-31.057	30.815	70.937	1.00	45.99
10818	CG	LYS	B	589	-32.115	31.744	71.537	1.00	48.60
10819	CD	LYS	B	589	-32.288	31.524	73.046	1.00	52.25
10820	CE	LYS	B	589	-33.778	31.463	73.447	1.00	54.10
10821	NZ	LYS	B	589	-33.964	31.373	74.926	1.00	54.99
10822	C	LYS	B	589	-30.340	29.836	68.733	1.00	44.98
10823	O	LYS	B	589	-29.896	30.742	68.015	1.00	45.18
10824	N	MET	B	590	-29.849	28.596	68.726	1.00	43.88
10825	CA	MET	B	590	-28.717	28.220	67.870	1.00	43.03
10826	CB	MET	B	590	-28.229	26.810	68.177	1.00	43.06
10827	CG	MET	B	590	-27.241	26.785	69.297	1.00	43.29
10828	SD	MET	B	590	-26.855	25.139	69.824	1.00	42.52
10829	CE	MET	B	590	-26.228	25.512	71.454	1.00	40.60
10830	C	MET	B	590	-28.946	28.364	66.372	1.00	42.27
10831	O	MET	B	590	-27.989	28.366	65.604	1.00	42.05
10832	N	GLY	B	591	-30.209	28.408	65.955	1.00	41.68
10833	CA	GLY	B	591	-30.531	28.683	64.565	1.00	40.28
10834	C	GLY	B	591	-30.969	27.606	63.595	1.00	39.89
10835	O	GLY	B	591	-31.449	27.930	62.510	1.00	39.69
10836	N	PHE	B	592	-30.807	26.336	63.955	1.00	39.16
10837	CA	PHE	B	592	-31.180	25.258	63.051	1.00	38.88
10838	CB	PHE	B	592	-29.943	24.481	62.631	1.00	39.01
10839	CG	PHE	B	592	-28.947	24.311	63.734	1.00	39.41
10840	CD1	PHE	B	592	-27.733	24.973	63.702	1.00	39.01
10841	CE1	PHE	B	592	-26.820	24.811	64.720	1.00	38.57
10842	CZ	PHE	B	592	-27.118	23.993	65.791	1.00	38.32
10843	CE2	PHE	B	592	-28.327	23.326	65.834	1.00	39.40
10844	CD2	PHE	B	592	-29.233	23.494	64.813	1.00	38.42
10845	C	PHE	B	592	-32.202	24.329	63.702	1.00	38.46
10846	O	PHE	B	592	-32.220	23.113	63.457	1.00	38.09
10847	N	VAL	B	593	-33.049	24.922	64.536	1.00	37.77
10848	CA	VAL	B	593	-34.079	24.181	65.245	1.00	37.24
10849	CB	VAL	B	593	-33.778	24.100	66.746	1.00	37.03
10850	CG1	VAL	B	593	-34.960	23.481	67.475	1.00	38.18
10851	CG2	VAL	B	593	-32.525	23.289	66.993	1.00	35.08
10852	C	VAL	B	593	-35.469	24.780	65.049	1.00	36.99
10853	O	VAL	B	593	-35.669	25.975	65.183	1.00	37.00

FIGURE 3 HE

A	B	C	D	E	F	G	H	I	J
10854	N	ASP	B	594	-36.425	23.921	64.718	1.00	36.94
10855	CA	ASP	B	594	-37.811	24.326	64.546	1.00	36.41
10856	CB	ASP	B	594	-38.534	23.374	63.598	1.00	36.50
10857	CG	ASP	B	594	-39.998	23.712	63.447	1.00	35.85
10858	OD1	ASP	B	594	-40.682	23.044	62.656	1.00	35.54
10859	OD2	ASP	B	594	-40.553	24.641	64.073	1.00	37.18
10860	C	ASP	B	594	-38.531	24.370	65.891	1.00	36.63
10861	O	ASP	B	594	-38.871	23.337	66.479	1.00	35.76
10862	N	ASN	B	595	-38.763	25.592	66.346	1.00	37.09
10863	CA	ASN	B	595	-39.398	25.888	67.619	1.00	37.40
10864	CB	ASN	B	595	-39.615	27.392	67.730	1.00	38.21
10865	CG	ASN	B	595	-38.442	28.077	68.326	1.00	41.32
10866	OD1	ASN	B	595	-37.398	27.463	68.486	1.00	44.68
10867	ND2	ASN	B	595	-38.596	29.353	68.683	1.00	44.83
10868	C	ASN	B	595	-40.732	25.238	67.829	1.00	36.33
10869	O	ASN	B	595	-41.198	25.121	68.963	1.00	35.77
10870	N	LYS	B	596	-41.370	24.862	66.736	1.00	35.44
10871	CA	LYS	B	596	-42.703	24.292	66.840	1.00	35.17
10872	CB	LYS	B	596	-43.531	24.635	65.604	1.00	35.40
10873	CG	LYS	B	596	-43.862	26.079	65.433	1.00	37.84
10874	CD	LYS	B	596	-44.459	26.298	64.051	1.00	41.84
10875	CE	LYS	B	596	-43.501	25.866	62.928	1.00	45.03
10876	NZ	LYS	B	596	-42.146	26.569	62.900	1.00	43.27
10877	C	LYS	B	596	-42.643	22.780	66.988	1.00	33.77
10878	O	LYS	B	596	-43.663	22.133	67.193	1.00	33.83
10879	N	ARG	B	597	-41.446	22.222	66.880	1.00	32.37
10880	CA	ARG	B	597	-41.292	20.776	66.926	1.00	30.79
10881	CB	ARG	B	597	-41.179	20.224	65.519	1.00	30.90
10882	CG	ARG	B	597	-42.481	20.303	64.742	1.00	31.54
10883	CD	ARG	B	597	-42.440	19.570	63.422	1.00	31.38
10884	NE	ARG	B	597	-41.509	20.240	62.528	1.00	31.70
10885	CZ	ARG	B	597	-41.056	19.731	61.392	1.00	33.10
10886	NH1	ARG	B	597	-41.448	18.529	61.003	1.00	32.23
10887	NH2	ARG	B	597	-40.197	20.422	60.646	1.00	31.81
10888	C	ARG	B	597	-40.107	20.354	67.760	1.00	29.86
10889	O	ARG	B	597	-39.109	19.869	67.261	1.00	29.51
10890	N	ILE	B	598	-40.229	20.566	69.053	1.00	28.96
10891	CA	ILE	B	598	-39.206	20.150	69.976	1.00	28.37
10892	CB	ILE	B	598	-38.662	21.337	70.754	1.00	28.00
10893	CG1	ILE	B	598	-38.116	22.376	69.796	1.00	27.47
10894	CD1	ILE	B	598	-37.625	23.614	70.485	1.00	27.15
10895	CG2	ILE	B	598	-37.567	20.886	71.693	1.00	28.30
10896	C	ILE	B	598	-39.869	19.173	70.923	1.00	28.08
10897	O	ILE	B	598	-40.916	19.457	71.495	1.00	27.15
10898	N	ALA	B	599	-39.260	18.010	71.084	1.00	28.09
10899	CA	ALA	B	599	-39.843	17.015	71.960	1.00	27.94
10900	CB	ALA	B	599	-40.346	15.821	71.150	1.00	27.68
10901	C	ALA	B	599	-38.834	16.582	72.997	1.00	27.63
10902	O	ALA	B	599	-37.686	16.985	72.969	1.00	28.42
10903	N	ILE	B	600	-39.262	15.761	73.931	1.00	27.13
10904	CA	ILE	B	600	-38.343	15.288	74.931	1.00	26.72

FIGURE 3 HF

A	B	C	D	E	F	G	H	I	J
10905	CB	ILE	B	600	-38.429	16.187	76.192	1.00	26.71
10906	CG1	ILE	B	600	-37.506	15.685	77.298	1.00	27.36
10907	CD1	ILE	B	600	-37.320	16.685	78.503	1.00	30.58
10908	CG2	ILE	B	600	-39.884	16.280	76.672	1.00	25.85
10909	C	ILE	B	600	-38.722	13.854	75.260	1.00	26.65
10910	O	ILE	B	600	-39.891	13.491	75.239	1.00	25.57
10911	N	TRP	B	601	-37.726	13.028	75.558	1.00	26.24
10912	CA	TRP	B	601	-38.055	11.691	75.979	1.00	25.83
10913	CB	TRP	B	601	-38.241	10.779	74.768	1.00	25.63
10914	CG	TRP	B	601	-37.071	9.993	74.383	1.00	23.01
10915	CD1	TRP	B	601	-36.013	10.407	73.628	1.00	20.91
10916	NE1	TRP	B	601	-35.137	9.367	73.438	1.00	21.35
10917	CE2	TRP	B	601	-35.619	8.251	74.067	1.00	21.02
10918	CD2	TRP	B	601	-36.850	8.610	74.664	1.00	22.98
10919	CE3	TRP	B	601	-37.553	7.641	75.378	1.00	21.50
10920	CZ3	TRP	B	601	-37.008	6.354	75.478	1.00	24.97
10921	CH2	TRP	B	601	-35.784	6.036	74.864	1.00	23.82
10922	CZ2	TRP	B	601	-35.079	6.974	74.161	1.00	22.00
10923	C	TRP	B	601	-37.006	11.166	76.929	1.00	25.90
10924	O	TRP	B	601	-35.868	11.619	76.919	1.00	25.94
10925	N	GLY	B	602	-37.405	10.239	77.782	1.00	25.43
10926	CA	GLY	B	602	-36.463	9.646	78.697	1.00	25.31
10927	C	GLY	B	602	-37.041	8.405	79.332	1.00	25.50
10928	O	GLY	B	602	-38.250	8.187	79.274	1.00	25.17
10929	N	TRP	B	603	-36.172	7.645	80.000	1.00	25.72
10930	CA	TRP	B	603	-36.507	6.372	80.626	1.00	25.45
10931	CB	TRP	B	603	-35.667	5.293	79.902	1.00	25.49
10932	CG	TRP	B	603	-36.141	3.874	79.984	1.00	25.45
10933	CD1	TRP	B	603	-36.340	3.148	81.105	1.00	25.41
10934	NE1	TRP	B	603	-36.768	1.882	80.783	1.00	25.87
10935	CE2	TRP	B	603	-36.821	1.764	79.418	1.00	25.67
10936	CD2	TRP	B	603	-36.437	2.999	78.881	1.00	25.16
10937	CE3	TRP	B	603	-36.400	3.134	77.488	1.00	24.78
10938	CZ3	TRP	B	603	-36.765	2.058	76.694	1.00	22.45
10939	CH2	TRP	B	603	-37.130	0.842	77.257	1.00	22.60
10940	CZ2	TRP	B	603	-37.174	0.671	78.613	1.00	23.90
10941	C	TRP	B	603	-36.147	6.445	82.119	1.00	25.53
10942	O	TRP	B	603	-35.051	6.864	82.475	1.00	25.25
10943	N	SER	B	604	-37.050	6.032	83.003	1.00	26.12
10944	CA	SER	B	604	-36.732	6.008	84.438	1.00	26.35
10945	CB	SER	B	604	-35.447	5.196	84.688	1.00	26.35
10946	OG	SER	B	604	-35.397	4.684	86.014	1.00	25.82
10947	C	SER	B	604	-36.608	7.436	85.002	1.00	26.75
10948	O	SER	B	604	-37.573	8.185	84.947	1.00	27.00
10949	N	TYR	B	605	-35.436	7.822	85.526	1.00	26.70
10950	CA	TYR	B	605	-35.241	9.209	85.985	1.00	26.20
10951	CB	TYR	B	605	-33.807	9.479	86.481	1.00	25.85
10952	CG	TYR	B	605	-33.693	10.715	87.352	1.00	26.33
10953	CD1	TYR	B	605	-33.605	10.611	88.730	1.00	26.80
10954	CE1	TYR	B	605	-33.505	11.730	89.520	1.00	27.25
10955	CZ	TYR	B	605	-33.525	12.982	88.947	1.00	26.52

FIGURE 3 HG

A	B	C	D	E	F	G	H	I	J
10956	OH	TYR	B	605	-33.450	14.116	89.750	1.00	27.45
10957	CE2	TYR	B	605	-33.625	13.113	87.595	1.00	26.09
10958	CD2	TYR	B	605	-33.703	11.983	86.801	1.00	27.69
10959	C	TYR	B	605	-35.529	10.132	84.824	1.00	25.82
10960	O	TYR	B	605	-36.026	11.251	84.994	1.00	25.93
10961	N	GLY	B	606	-35.167	9.676	83.636	1.00	25.68
10962	CA	GLY	B	606	-35.444	10.437	82.428	1.00	26.10
10963	C	GLY	B	606	-36.936	10.453	82.106	1.00	26.32
10964	O	GLY	B	606	-37.385	11.275	81.328	1.00	27.10
10965	N	GLY	B	607	-37.709	9.539	82.682	1.00	26.64
10966	CA	GLY	B	607	-39.140	9.550	82.448	1.00	26.70
10967	C	GLY	B	607	-39.700	10.611	83.370	1.00	27.06
10968	O	GLY	B	607	-40.596	11.410	83.015	1.00	26.72
10969	N	TYR	B	608	-39.146	10.602	84.580	1.00	26.75
10970	CA	TYR	B	608	-39.489	11.552	85.607	1.00	26.74
10971	CB	TYR	B	608	-38.608	11.314	86.820	1.00	26.39
10972	CG	TYR	B	608	-38.776	12.343	87.904	1.00	26.42
10973	CD1	TYR	B	608	-37.744	13.222	88.216	1.00	25.46
10974	CE1	TYR	B	608	-37.879	14.167	89.206	1.00	24.73
10975	CZ	TYR	B	608	-39.065	14.254	89.900	1.00	26.75
10976	OH	TYR	B	608	-39.201	15.189	90.899	1.00	26.44
10977	CE2	TYR	B	608	-40.122	13.399	89.602	1.00	26.14
10978	CD2	TYR	B	608	-39.970	12.445	88.615	1.00	25.22
10979	C	TYR	B	608	-39.269	12.957	85.057	1.00	26.97
10980	O	TYR	B	608	-40.213	13.741	84.948	1.00	27.41
10981	N	VAL	B	609	-38.036	13.252	84.658	1.00	26.42
10982	CA	VAL	B	609	-37.717	14.578	84.132	1.00	26.01
10983	CB	VAL	B	609	-36.209	14.741	83.824	1.00	24.91
10984	CG1	VAL	B	609	-35.959	16.013	83.018	1.00	25.28
10985	CG2	VAL	B	609	-35.447	14.811	85.117	1.00	26.19
10986	C	VAL	B	609	-38.559	14.977	82.925	1.00	26.13
10987	O	VAL	B	609	-39.048	16.119	82.853	1.00	26.91
10988	N	THR	B	610	-38.699	14.064	81.963	1.00	25.25
10989	CA	THR	B	610	-39.546	14.317	80.802	1.00	24.57
10990	CB	THR	B	610	-39.698	13.047	79.957	1.00	24.19
10991	CG1	THR	B	610	-38.462	12.760	79.320	1.00	23.32
10992	CG2	THR	B	610	-40.641	13.302	78.786	1.00	23.39
10993	C	THR	B	610	-40.937	14.748	81.244	1.00	24.41
10994	O	THR	B	610	-41.488	15.737	80.752	1.00	24.36
10995	N	SER	B	611	-41.515	13.966	82.150	1.00	24.64
10996	CA	SER	B	611	-42.832	14.262	82.697	1.00	24.92
10997	CB	SER	B	611	-43.291	13.129	83.607	1.00	24.80
10998	OG	SER	B	611	-43.361	11.912	82.885	1.00	27.23
10999	C	SER	B	611	-42.845	15.579	83.479	1.00	24.77
11000	O	SER	B	611	-43.781	16.356	83.378	1.00	24.75
11001	N	MET	B	612	-41.819	15.828	84.275	1.00	24.95
11002	CA	MET	B	612	-41.794	17.078	85.027	1.00	25.17
11003	CB	MET	B	612	-40.673	17.095	86.025	1.00	24.49
11004	CG	MET	B	612	-40.860	16.104	87.098	1.00	25.36
11005	SD	MET	B	612	-42.043	16.655	88.288	1.00	27.85
11006	CE	MET	B	612	-41.102	18.007	89.180	1.00	24.85

FIGURE 3 HH

A	B	C	D	E	F	G	H	I	J
11007	C	MET	B	612	-41.647	18.231	84.060	1.00	25.26
11008	O	MET	B	612	-42.230	19.284	84.262	1.00	24.69
11009	N	VAL	B	651	-40.899	18.005	82.986	1.00	25.69
11010	CA	VAL	B	613	-40.714	19.038	81.985	1.00	26.51
11011	CB	VAL	B	613	-39.604	18.667	81.009	1.00	26.40
11012	CG1	VAL	B	613	-39.745	19.468	79.724	1.00	24.53
11013	CG2	VAL	B	613	-38.235	18.893	81.665	1.00	26.78
11014	C	VAL	B	613	-41.995	19.280	81.206	1.00	27.69
11015	O	VAL	B	613	-42.360	20.421	80.922	1.00	29.31
11016	N	LEU	B	614	-42.693	18.213	80.852	1.00	28.17
11017	CA	LEU	B	614	-43.923	18.390	80.108	1.00	28.42
11018	CB	LEU	B	614	-44.466	17.047	79.603	1.00	28.18
11019	CG	LEU	B	614	-43.650	16.395	78.490	1.00	28.05
11020	CD1	LEU	B	614	-43.707	17.176	77.182	1.00	27.46
11021	CD2	LEU	B	614	-44.096	14.942	78.285	1.00	28.59
11022	C	LEU	B	614	-44.965	19.075	80.959	1.00	28.54
11023	O	LEU	B	614	-45.823	19.756	80.437	1.00	28.75
11024	N	GLY	B	615	-44.921	18.872	82.270	1.00	28.67
11025	CA	GLY	B	615	-45.909	19.506	83.115	1.00	29.23
11026	C	GLY	B	615	-45.456	20.827	83.730	1.00	29.40
11027	O	GLY	B	615	-46.066	21.303	84.691	1.00	29.24
11028	N	SER	B	616	-44.401	21.423	83.176	1.00	29.38
11029	CA	SER	B	616	-43.844	22.656	83.739	1.00	29.93
11030	CB	SER	B	616	-42.377	22.809	83.354	1.00	29.44
11031	OG	SER	B	616	-42.242	22.899	81.947	1.00	30.22
11032	C	SER	B	616	-44.601	23.914	83.311	1.00	30.00
11033	O	SER	B	616	-44.522	24.942	83.975	1.00	30.74
11034	N	GLY	B	617	-45.311	23.825	82.196	1.00	30.15
11035	CA	GLY	B	617	-46.071	24.932	81.667	1.00	30.00
11036	C	GLY	B	617	-45.196	25.825	80.830	1.00	30.41
11037	O	GLY	B	617	-45.622	26.895	80.410	1.00	30.44
11038	N	SER	B	618	-43.982	25.364	80.541	1.00	30.40
11039	CA	SER	B	618	-42.996	26.188	79.834	1.00	30.05
11040	CB	SER	B	618	-41.633	25.510	79.886	1.00	29.77
11041	OG	SER	B	618	-41.508	24.580	78.840	1.00	29.76
11042	C	SER	B	618	-43.326	26.550	78.384	1.00	30.09
11043	O	SER	B	618	-42.786	27.507	77.839	1.00	30.10
11044	N	GLY	B	619	-44.179	25.759	77.745	1.00	29.77
11045	CA	GLY	B	619	-44.522	25.998	76.361	1.00	28.92
11046	C	GLY	B	619	-43.446	25.601	75.376	1.00	28.97
11047	O	GLY	B	619	-43.663	25.666	74.177	1.00	28.88
11048	N	VAL	B	620	-42.285	25.166	75.847	1.00	29.59
11049	CA	VAL	B	620	-41.209	24.853	74.901	1.00	30.18
11050	CB	VAL	B	620	-39.800	24.867	75.558	1.00	30.73
11051	CG1	VAL	B	620	-38.724	24.512	74.524	1.00	31.72
11052	CG2	VAL	B	620	-39.488	26.236	76.143	1.00	30.75
11053	C	VAL	B	620	-41.418	23.545	74.153	1.00	29.98
11054	O	VAL	B	620	-41.136	23.448	72.957	1.00	30.00
11055	N	PHE	B	621	-41.955	22.553	74.850	1.00	30.04
11056	CA	PHE	B	621	-42.115	21.218	74.277	1.00	29.81
11057	CB	PHE	B	621	-41.692	20.169	75.296	1.00	29.63

FIGURE 3 HI

A	B	C	D	E	F	G	H	I	J
11058	CG	PHE	B	621	-40.263	20.303	75.720	1.00	31.06
11059	CD1	PHE	B	621	-39.912	21.150	76.763	1.00	31.31
11060	CE1	PHE	B	621	-38.601	21.288	77.144	1.00	31.62
11061	CZ	PHE	B	621	-37.611	20.572	76.479	1.00	31.98
11062	CE2	PHE	B	621	-37.951	19.720	75.439	1.00	30.14
11063	CD2	PHE	B	621	-39.262	19.592	75.064	1.00	30.15
11064	C	PHE	B	621	-43.508	20.923	73.760	1.00	29.14
11065	O	PHE	B	621	-44.501	21.078	74.458	1.00	29.64
11066	N	LYS	B	622	-43.578	20.494	72.518	1.00	28.38
11067	CA	LYS	B	622	-44.846	20.142	71.936	1.00	28.57
11068	CB	LYS	B	622	-44.684	20.107	70.423	1.00	28.30
11069	CG	LYS	B	622	-45.972	19.819	69.654	1.00	27.32
11070	CD	LYS	B	622	-45.679	19.304	68.262	1.00	25.74
11071	CE	LYS	B	622	-46.812	19.629	67.312	1.00	29.17
11072	NZ	LYS	B	622	-47.880	18.607	67.329	1.00	30.08
11073	C	LYS	B	622	-45.188	18.733	72.361	1.00	28.90
11074	O	LYS	B	622	-46.338	18.321	72.364	1.00	29.01
11075	N	CYS	B	623	-44.174	18.049	72.846	1.00	29.41
11076	CA	CYS	B	623	-44.163	16.621	72.777	1.00	30.38
11077	CB	CYS	B	623	-43.343	16.450	71.526	1.00	32.05
11078	SG	CYS	B	623	-43.925	15.263	70.415	1.00	35.26
11079	C	CYS	B	623	-43.342	15.871	73.804	1.00	28.85
11080	O	CYS	B	623	-42.237	16.278	74.078	1.00	28.04
11081	N	GLY	B	624	-43.819	14.718	74.270	1.00	27.34
11082	CA	GLY	B	624	-43.032	13.943	75.200	1.00	26.09
11083	C	GLY	B	624	-43.401	12.492	75.416	1.00	25.41
11084	O	GLY	B	624	-44.578	12.120	75.383	1.00	25.44
11085	N	ILE	B	625	-42.381	11.671	75.649	1.00	24.38
11086	CA	ILE	B	625	-42.577	10.258	75.933	1.00	23.41
11087	CB	ILE	B	625	-42.016	9.342	74.813	1.00	23.54
11088	CG1	ILE	B	625	-42.540	9.730	73.439	1.00	22.37
11089	CD1	ILE	B	625	-41.874	8.957	72.293	1.00	22.74
11090	CG2	ILE	B	625	-42.374	7.889	75.106	1.00	21.80
11091	C	ILE	B	625	-41.854	9.902	77.214	1.00	23.00
11092	O	ILE	B	625	-40.641	10.039	77.294	1.00	22.97
11093	N	ALA	B	626	-42.596	9.434	78.208	1.00	21.99
11094	CA	ALA	B	626	-41.996	8.965	79.446	1.00	21.51
11095	CB	ALA	B	626	-42.714	9.591	80.626	1.00	21.45
11096	C	ALA	B	626	-42.059	7.426	79.530	1.00	21.24
11097	O	ALA	B	626	-43.151	6.840	79.462	1.00	20.87
11098	N	VAL	B	627	-40.899	6.776	79.673	1.00	21.44
11099	CA	VAL	B	627	-40.835	5.310	79.805	1.00	21.61
11100	CB	VAL	B	627	-39.898	4.661	78.757	1.00	21.50
11101	CG1	VAL	B	627	-40.092	3.155	78.747	1.00	21.19
11102	CG2	VAL	B	627	-40.143	5.231	77.357	1.00	21.77
11103	C	VAL	B	627	-40.394	4.892	81.214	1.00	21.72
11104	O	VAL	B	627	-39.311	5.258	81.658	1.00	21.89
11105	N	ALA	B	628	-41.236	4.127	81.907	1.00	21.55
11106	CA	ALA	B	628	-40.969	3.667	83.285	1.00	21.74
11107	CB	ALA	B	628	-39.960	2.585	83.289	1.00	21.90
11108	C	ALA	B	628	-40.539	4.778	84.233	1.00	22.31

FIGURE 3 HJ

A	B	C	D	E	F	G	H	I	J
11109	O	ALA	B	628	-39.577	4.649	84.990	1.00	21.95
11110	N	PRO	B	629	-41.309	5.851	84.239	1.00	22.62
11111	CA	PRO	B	629	-40.939	7.052	84.984	1.00	22.22
11112	CB	PRO	B	629	-41.924	8.114	84.462	1.00	22.59
11113	CG	PRO	B	629	-42.917	7.396	83.615	1.00	22.96
11114	CD	PRO	B	629	-42.638	5.947	83.610	1.00	22.34
11115	C	PRO	B	629	-41.201	6.916	86.448	1.00	21.88
11116	O	PRO	B	629	-42.170	6.250	86.852	1.00	22.12
11117	N	VAL	B	630	-40.369	7.576	87.241	1.00	21.25
11118	CA	VAL	B	630	-40.671	7.744	88.646	1.00	20.98
11119	CB	VAL	B	630	-39.392	8.151	89.447	1.00	21.62
11120	CG1	VAL	B	630	-39.740	8.765	90.795	1.00	20.24
11121	CG2	VAL	B	630	-38.505	6.943	89.645	1.00	20.74
11122	C	VAL	B	630	-41.686	8.877	88.630	1.00	20.94
11123	O	VAL	B	630	-41.624	9.758	87.766	1.00	20.42
11124	N	SER	B	631	-42.654	8.866	89.533	1.00	21.29
11125	CA	SER	B	631	-43.641	9.950	89.500	1.00	22.20
11126	CB	SER	B	631	-45.016	9.426	89.102	1.00	21.51
11127	OG	SER	B	631	-45.506	8.572	90.108	1.00	21.79
11128	C	SER	B	631	-43.715	10.708	90.826	1.00	22.31
11129	O	SER	B	631	-44.127	11.857	90.875	1.00	22.12
11130	N	ARG	B	632	-43.369	10.028	91.902	1.00	22.84
11131	CA	ARG	B	632	-43.251	10.676	93.178	1.00	24.48
11132	CB	ARG	B	632	-44.570	10.749	93.938	1.00	24.78
11133	CG	ARG	B	632	-44.772	9.608	94.859	1.00	28.29
11134	CD	ARG	B	632	-45.406	9.963	96.172	1.00	33.49
11135	NE	ARG	B	632	-46.447	10.954	96.047	1.00	35.71
11136	CZ	ARG	B	632	-47.196	11.363	97.060	1.00	38.06
11137	NH1	ARG	B	632	-48.111	12.306	96.862	1.00	36.08
11138	NH2	ARG	B	632	-47.033	10.826	98.272	1.00	38.76
11139	C	ARG	B	632	-42.224	9.873	93.932	1.00	24.25
11140	O	ARG	B	632	-42.271	8.637	93.923	1.00	24.75
11141	N	TRP	B	633	-41.314	10.582	94.592	1.00	24.41
11142	CA	TRP	B	633	-40.159	9.974	95.258	1.00	24.82
11143	CB	TRP	B	633	-39.121	11.050	95.606	1.00	24.74
11144	CG	TRP	B	633	-38.523	11.596	94.366	1.00	23.36
11145	CD1	TRP	B	633	-38.728	12.816	93.828	1.00	21.42
11146	NE1	TRP	B	633	-38.047	12.927	92.637	1.00	20.50
11147	CE2	TRP	B	633	-37.376	11.759	92.394	1.00	20.18
11148	CD2	TRP	B	633	-37.666	10.888	93.449	1.00	22.71
11149	CE3	TRP	B	633	-37.107	9.598	93.428	1.00	21.96
11150	CZ3	TRP	B	633	-36.286	9.239	92.375	1.00	20.82
11151	CH2	TRP	B	633	-36.010	10.133	91.345	1.00	22.31
11152	CZ2	TRP	B	633	-36.545	11.398	91.331	1.00	22.59
11153	C	TRP	B	633	-40.485	9.045	96.420	1.00	25.58
11154	O	TRP	B	633	-39.739	8.128	96.714	1.00	26.20
11155	N	GLU	B	634	-41.623	9.234	97.059	1.00	26.51
11156	CA	GLU	B	634	-41.974	8.321	98.127	1.00	27.59
11157	CB	GLU	B	634	-43.173	8.852	98.923	1.00	28.41
11158	CG	GLU	B	634	-42.875	10.009	99.859	1.00	30.31
11159	CD	GLU	B	634	-43.883	11.137	99.660	1.00	34.65

FIGURE 3 HK

A	B	C	D	E	F	G	H	I	J
11160	OE1	GLU	B	634	-44.789	11.313	100.508	1.00	35.00
11161	OE2	GLU	B	634	-43.789	11.829	98.616	1.00	37.30
11162	C	GLU	B	634	-42.260	6.898	97.602	1.00	27.46
11163	O	GLU	B	634	-42.306	5.961	98.389	1.00	27.14
11164	N	TYR	B	635	-42.454	6.752	96.285	1.00	27.23
11165	CA	TYR	B	635	-42.699	5.441	95.655	1.00	27.06
11166	CB	TYR	B	635	-43.411	5.595	94.309	1.00	26.89
11167	CG	TYR	B	635	-44.817	6.153	94.352	1.00	26.76
11168	CD1	TYR	B	635	-45.628	5.992	95.474	1.00	23.71
11169	CE1	TYR	B	635	-46.906	6.487	95.498	1.00	24.06
11170	CZ	TYR	B	635	-47.394	7.155	94.396	1.00	25.50
11171	OH	TYR	B	635	-48.675	7.661	94.391	1.00	26.00
11172	CE2	TYR	B	635	-46.609	7.334	93.273	1.00	26.24
11173	CD2	TYR	B	635	-45.335	6.831	93.251	1.00	25.67
11174	C	TYR	B	635	-41.427	4.681	95.322	1.00	27.02
11175	O	TYR	B	635	-41.461	3.479	95.123	1.00	27.59
11176	N	TYR	B	636	-40.314	5.388	95.200	1.00	27.04
11177	CA	TYR	B	636	-39.083	4.743	94.808	1.00	26.78
11178	CB	TYR	B	636	-38.226	5.682	93.990	1.00	26.50
11179	CG	TYR	B	636	-37.243	4.930	93.178	1.00	25.84
11180	CD1	TYR	B	636	-37.633	3.778	92.512	1.00	24.02
11181	CE1	TYR	B	636	-36.735	3.060	91.765	1.00	25.85
11182	CZ	TYR	B	636	-35.442	3.480	91.663	1.00	26.22
11183	OH	TYR	B	636	-34.578	2.738	90.901	1.00	29.04
11184	CE2	TYR	B	636	-35.014	4.638	92.318	1.00	27.07
11185	CD2	TYR	B	636	-35.917	5.350	93.076	1.00	25.48
11186	C	TYR	B	636	-38.320	4.168	95.995	1.00	26.99
11187	O	TYR	B	636	-38.723	4.348	97.133	1.00	26.78
11188	N	ASP	B	637	-37.233	3.451	95.727	1.00	27.76
11189	CA	ASP	B	637	-36.554	2.749	96.793	1.00	28.64
11190	CB	ASP	B	637	-35.692	1.581	96.265	1.00	29.22
11191	CG	ASP	B	637	-34.457	2.038	95.509	1.00	29.73
11192	OD1	ASP	B	637	-33.618	2.766	96.088	1.00	30.15
11193	OD2	ASP	B	637	-34.223	1.679	94.339	1.00	27.88
11194	C	ASP	B	637	-35.796	3.678	97.742	1.00	28.58
11195	O	ASP	B	637	-35.351	4.759	97.355	1.00	27.81
11196	N	SER	B	638	-35.687	3.252	98.993	1.00	28.79
11197	CA	SER	B	638	-35.047	4.070	100.021	1.00	29.71
11198	CB	SER	B	638	-35.147	3.364	101.363	1.00	30.02
11199	OG	SER	B	638	-34.538	2.089	101.298	1.00	31.85
11200	C	SER	B	638	-33.586	4.472	99.757	1.00	29.51
11201	O	SER	B	638	-33.218	5.666	99.859	1.00	29.46
11202	N	VAL	B	639	-32.739	3.515	99.398	1.00	29.23
11203	CA	VAL	B	639	-31.328	3.893	99.293	1.00	28.76
11204	CB	VAL	B	639	-30.347	2.708	99.372	1.00	28.62
11205	CG1	VAL	B	639	-29.415	2.664	98.191	1.00	30.17
11206	CG2	VAL	B	639	-31.069	1.434	99.627	1.00	27.57
11207	C	VAL	B	639	-31.024	4.879	98.183	1.00	28.25
11208	O	VAL	B	639	-30.274	5.825	98.383	1.00	28.61
11209	N	TYR	B	640	-31.623	4.702	97.022	1.00	27.85
11210	CA	TYR	B	640	-31.400	5.680	95.979	1.00	27.17



FIGURE 3 HL

A	B	C	D	E	F	G	H	I	J
11211	CB	TYR	B	640	-31.926	5.154	94.654	1.00	27.16
11212	CG	TYR	B	640	-31.729	6.093	93.481	1.00	25.27
11213	CD1	TYR	B	640	-30.704	5.885	92.568	1.00	23.80
11214	CE1	TYR	B	640	-30.523	6.752	91.487	1.00	24.47
11215	CZ	TYR	B	640	-31.386	7.814	91.306	1.00	22.75
11216	OH	TYR	B	640	-31.212	8.651	90.229	1.00	23.63
11217	CE2	TYR	B	640	-32.420	8.028	92.191	1.00	21.55
11218	CD2	TYR	B	640	-32.579	7.175	93.280	1.00	23.20
11219	C	TYR	B	640	-32.081	7.018	96.335	1.00	27.36
11220	O	TYR	B	640	-31.454	8.072	96.309	1.00	27.20
11221	N	THR	B	641	-33.358	6.975	96.680	1.00	27.02
11222	CA	THR	B	641	-34.083	8.216	96.969	1.00	27.70
11223	CB	THR	B	641	-35.588	7.934	97.220	1.00	27.48
11224	OG1	THR	B	641	-36.098	7.085	96.180	1.00	26.79
11225	CG2	THR	B	641	-36.385	9.217	97.118	1.00	26.28
11226	C	THR	B	641	-33.546	9.032	98.146	1.00	27.73
11227	O	THR	B	641	-33.308	10.233	98.017	1.00	27.27
11228	N	GLU	B	642	-33.421	8.387	99.301	1.00	28.13
11229	CA	GLU	B	642	-32.970	9.069	100.519	1.00	28.83
11230	CB	GLU	B	642	-33.056	8.144	101.740	1.00	28.92
11231	CG	GLU	B	642	-34.464	7.610	102.007	1.00	27.27
11232	CD	GLU	B	642	-34.479	6.484	103.020	1.00	28.72
11233	OE1	GLU	B	642	-33.413	6.218	103.605	1.00	30.14
11234	OE2	GLU	B	642	-35.540	5.860	103.241	1.00	24.56
11235	C	GLU	B	642	-31.571	9.647	100.339	1.00	29.65
11236	O	GLU	B	642	-31.209	10.617	100.998	1.00	29.85
11237	N	ARG	B	643	-30.816	9.105	99.385	1.00	30.34
11238	CA	ARG	B	643	-29.468	9.582	99.124	1.00	30.99
11239	CB	ARG	B	643	-28.754	8.700	98.088	1.00	30.95
11240	CG	ARG	B	643	-27.281	9.049	97.868	1.00	29.73
11241	CD	ARG	B	643	-26.599	8.237	96.755	1.00	29.27
11242	NE	ARG	B	643	-26.793	6.805	96.945	1.00	27.98
11243	CZ	ARG	B	643	-27.111	5.957	95.974	1.00	27.57
11244	NH1	ARG	B	643	-27.282	4.687	96.257	1.00	26.22
11245	NH2	ARG	B	643	-27.274	6.379	94.720	1.00	26.92
11246	C	ARG	B	643	-29.502	11.017	98.643	1.00	31.73
11247	O	ARG	B	643	-28.590	11.813	98.920	1.00	31.73
11248	N	TYR	B	644	-30.566	11.348	97.927	1.00	32.09
11249	CA	TYR	B	644	-30.703	12.671	97.353	1.00	32.36
11250	CB	TYR	B	644	-30.970	12.547	95.847	1.00	32.58
11251	CG	TYR	B	644	-30.084	11.532	95.149	1.00	32.51
11252	CD1	TYR	B	644	-28.726	11.777	94.954	1.00	33.05
11253	CE1	TYR	B	644	-27.910	10.845	94.313	1.00	31.76
11254	CZ	TYR	B	644	-28.456	9.660	93.857	1.00	30.48
11255	OH	TYR	B	644	-27.665	8.733	93.237	1.00	29.23
11256	CE2	TYR	B	644	-29.794	9.393	94.037	1.00	32.14
11257	CD2	TYR	B	644	-30.604	10.326	94.682	1.00	32.61
11258	C	TYR	B	644	-31.811	13.488	98.006	1.00	32.48
11259	O	TYR	B	644	-31.833	14.699	97.889	1.00	32.79
11260	N	MET	B	645	-32.704	12.837	98.731	1.00	33.14
11261	CA	MET	B	645	-33.878	13.525	99.259	1.00	33.84

FIGURE 3 HM

A	B	C	D	E	F	G	H	I	J
11262	CB	MET	B	645	-35.143	12.910	98.652	1.00	33.47
11263	CG	MET	B	645	-35.302	13.175	97.165	1.00	32.72
11264	SD	MET	B	645	-35.747	14.897	96.878	1.00	35.29
11265	CE	MET	B	645	-37.378	14.900	97.690	1.00	31.46
11266	C	MET	B	645	-34.006	13.492	100.774	1.00	34.80
11267	O	MET	B	645	-34.934	14.071	101.329	1.00	35.04
11268	N	GLY	B	646	-33.089	12.810	101.446	1.00	35.50
11269	CA	GLY	B	646	-33.198	12.669	102.879	1.00	36.25
11270	C	GLY	B	646	-34.489	11.931	103.173	1.00	37.10
11271	O	GLY	B	646	-35.018	11.221	102.312	1.00	37.45
11272	N	LEU	B	647	-35.003	12.092	104.385	1.00	37.37
11273	CA	LEU	B	647	-36.213	11.405	104.784	1.00	37.69
11274	CB	LEU	B	647	-36.164	11.134	106.280	1.00	37.94
11275	CG	LEU	B	647	-35.666	9.750	106.672	1.00	39.05
11276	CD1	LEU	B	647	-34.972	9.031	105.508	1.00	39.78
11277	CD2	LEU	B	647	-34.766	9.832	107.891	1.00	42.00
11278	C	LEU	B	647	-37.449	12.204	104.435	1.00	37.87
11279	O	LEU	B	647	-37.431	13.433	104.478	1.00	38.26
11280	N	PRO	B	648	-38.522	11.513	104.057	1.00	37.85
11281	CA	PRO	B	648	-39.791	12.171	103.763	1.00	38.05
11282	CB	PRO	B	648	-40.468	11.169	102.821	1.00	37.86
11283	CG	PRO	B	648	-40.047	9.848	103.376	1.00	37.20
11284	CD	PRO	B	648	-38.617	10.052	103.861	1.00	37.95
11285	C	PRO	B	648	-40.594	12.382	105.051	1.00	38.12
11286	O	PRO	B	648	-41.737	11.967	105.186	1.00	37.94
11287	N	THR	B	649	-39.963	13.033	106.013	1.00	39.12
11288	CA	THR	B	649	-40.621	13.361	107.265	1.00	39.41
11289	CB	THR	B	649	-39.795	12.811	108.432	1.00	39.84
11290	OG1	THR	B	649	-38.439	13.266	108.316	1.00	40.07
11291	CG2	THR	B	649	-39.676	11.284	108.333	1.00	38.96
11292	C	THR	B	649	-40.766	14.878	107.369	1.00	39.87
11293	O	THR	B	649	-40.027	15.625	106.739	1.00	39.52
11294	N	PRO	B	650	-41.738	15.347	108.136	1.00	40.74
11295	CA	PRO	B	650	-41.866	16.789	108.358	1.00	41.41
11296	CB	PRO	B	650	-43.029	16.888	109.344	1.00	41.77
11297	CG	PRO	B	650	-43.830	15.638	109.075	1.00	40.96
11298	CD	PRO	B	650	-42.788	14.576	108.826	1.00	40.74
11299	C	PRO	B	650	-40.573	17.295	108.986	1.00	42.00
11300	O	PRO	B	650	-40.084	18.370	108.630	1.00	42.19
11301	N	GLU	B	651	-39.998	16.503	109.884	1.00	42.27
11302	CA	GLU	B	651	-38.750	16.900	110.517	1.00	43.04
11303	CB	GLU	B	651	-38.437	16.013	111.731	1.00	43.65
11304	CG	GLU	B	651	-38.960	14.581	111.639	1.00	46.27
11305	CD	GLU	B	651	-40.428	14.450	112.031	1.00	48.91
11306	OE1	GLU	B	651	-41.001	13.348	111.860	1.00	49.45
11307	OE2	GLU	B	651	-41.012	15.447	112.519	1.00	50.85
11308	C	GLU	B	651	-37.580	16.920	109.530	1.00	42.60
11309	O	GLU	B	651	-36.536	17.501	109.803	1.00	42.70
11310	N	ASP	B	652	-37.751	16.301	108.366	1.00	41.94
11311	CA	ASP	B	652	-36.658	16.284	107.398	1.00	40.34
11312	CB	ASP	B	652	-36.195	14.849	107.140	1.00	40.56

FIGURE 3 HN

A	B	C	D	E	F	G	H	I	J
11313	CG	ASP	B	652	-34.881	14.782	106.389	1.00	41.32
11314	OD1	ASP	B	652	-34.287	13.686	106.351	1.00	42.94
11315	OD2	ASP	B	652	-34.360	15.761	105.807	1.00	43.08
11316	C	ASP	B	652	-36.974	17.009	106.090	1.00	39.16
11317	O	ASP	B	652	-36.784	18.210	105.976	1.00	38.18
11318	N	ASN	B	653	-37.481	16.278	105.102	1.00	38.59
11319	CA	ASN	B	653	-37.642	16.866	103.777	1.00	37.75
11320	CB	ASN	B	653	-36.497	16.372	102.884	1.00	37.56
11321	CG	ASN	B	653	-36.285	17.237	101.693	1.00	36.92
11322	OD1	ASN	B	653	-36.601	18.411	101.720	1.00	37.91
11323	ND2	ASN	B	653	-35.757	16.661	100.621	1.00	38.45
11324	C	ASN	B	653	-38.991	16.603	103.116	1.00	37.39
11325	O	ASN	B	653	-39.155	16.811	101.906	1.00	37.19
11326	N	LEU	B	654	-39.959	16.160	103.908	1.00	36.97
11327	CA	LEU	B	654	-41.278	15.848	103.377	1.00	37.08
11328	CB	LEU	B	654	-42.278	15.570	104.491	1.00	37.28
11329	CG	LEU	B	654	-43.666	15.180	103.971	1.00	38.01
11330	CD1	LEU	B	654	-44.662	15.116	105.102	1.00	38.44
11331	CD2	LEU	B	654	-43.632	13.847	103.197	1.00	36.04
11332	C	LEU	B	654	-41.850	16.909	102.450	1.00	36.99
11333	O	LEU	B	654	-42.491	16.578	101.458	1.00	37.11
11334	N	ASP	B	655	-41.626	18.184	102.743	1.00	36.71
11335	CA	ASP	B	655	-42.205	19.200	101.874	1.00	37.08
11336	CB	ASP	B	655	-41.923	20.620	102.360	1.00	37.80
11337	CG	ASP	B	655	-42.766	21.000	103.567	1.00	40.19
11338	OD1	ASP	B	655	-43.653	20.200	103.963	1.00	41.54
11339	OD2	ASP	B	655	-42.599	22.073	104.188	1.00	43.81
11340	C	ASP	B	655	-41.756	19.040	100.439	1.00	36.43
11341	O	ASP	B	655	-42.586	19.062	99.534	1.00	36.62
11342	N	HIS	B	656	-40.456	18.864	100.221	1.00	35.68
11343	CA	HIS	B	656	-39.984	18.756	98.851	1.00	34.84
11344	CB	HIS	B	656	-38.497	19.045	98.675	1.00	34.52
11345	CG	HIS	B	656	-38.088	19.053	97.238	1.00	34.18
11346	ND1	HIS	B	656	-38.490	20.039	96.364	1.00	34.46
11347	CE1	HIS	B	656	-38.037	19.763	95.153	1.00	35.30
11348	NE2	HIS	B	656	-37.380	18.617	95.206	1.00	34.69
11349	CD2	HIS	B	656	-37.413	18.144	96.496	1.00	32.87
11350	C	HIS	B	656	-40.376	17.440	98.192	1.00	34.46
11351	O	HIS	B	656	-40.547	17.385	96.987	1.00	34.36
11352	N	TYR	B	657	-40.533	16.392	98.985	1.00	34.15
11353	CA	TYR	B	657	-41.034	15.135	98.459	1.00	34.15
11354	CB	TYR	B	657	-41.248	14.128	99.578	1.00	33.67
11355	CG	TYR	B	657	-40.122	13.151	99.774	1.00	34.12
11356	CD1	TYR	B	657	-40.111	11.918	99.109	1.00	32.26
11357	CE1	TYR	B	657	-39.073	11.019	99.310	1.00	32.46
11358	CZ	TYR	B	657	-38.026	11.364	100.171	1.00	32.01
11359	OH	TYR	B	657	-36.988	10.500	100.408	1.00	28.40
11360	CE2	TYR	B	657	-38.021	12.576	100.814	1.00	31.61
11361	CD2	TYR	B	657	-39.059	13.461	100.610	1.00	32.78
11362	C	TYR	B	657	-42.371	15.374	97.810	1.00	34.51
11363	O	TYR	B	657	-42.598	14.969	96.663	1.00	35.46

FIGURE 3 HO

A	B	C	D	E	F	G	H	I	J
11364	N	ARG	B	658	-43.257	16.041	98.548	1.00	34.34
11365	CA	ARG	B	658	-44.621	16.309	98.078	1.00	34.28
11366	CB	ARG	B	658	-45.533	16.710	99.251	1.00	33.97
11367	CG	ARG	B	658	-45.624	15.670	100.366	1.00	33.52
11368	CD	ARG	B	658	-46.558	14.482	100.053	1.00	32.99
11369	NE	ARG	B	658	-46.162	13.262	100.760	1.00	31.06
11370	CZ	ARG	B	658	-46.732	12.811	101.868	1.00	30.92
11371	NH1	ARG	B	658	-47.741	13.466	102.423	1.00	30.91
11372	NH2	ARG	B	658	-46.284	11.697	102.431	1.00	31.55
11373	C	ARG	B	658	-44.696	17.381	96.998	1.00	34.35
11374	O	ARG	B	658	-45.724	17.517	96.329	1.00	34.58
11375	N	ASN	B	659	-43.616	18.130	96.810	1.00	33.88
11376	CA	ASN	B	659	-43.632	19.228	95.846	1.00	34.13
11377	CB	ASN	B	659	-42.758	20.375	96.365	1.00	35.28
11378	CG	ASN	B	659	-43.468	21.707	96.337	1.00	39.53
11379	OD1	ASN	B	659	-44.314	21.978	97.202	1.00	45.44
11380	ND2	ASN	B	659	-43.140	22.552	95.351	1.00	42.35
11381	C	ASN	B	659	-43.073	18.811	94.507	1.00	32.93
11382	O	ASN	B	659	-43.151	19.554	93.535	1.00	32.81
11383	N	SER	B	660	-42.486	17.626	94.462	1.00	31.18
11384	CA	SER	B	660	-41.767	17.196	93.275	1.00	30.39
11385	CB	SER	B	660	-40.329	16.884	93.676	1.00	29.81
11386	OG	SER	B	660	-40.358	15.885	94.689	1.00	29.23
11387	C	SER	B	660	-42.386	15.943	92.642	1.00	29.69
11388	O	SER	B	660	-41.685	15.002	92.263	1.00	29.31
11389	N	THR	B	661	-43.699	15.913	92.568	1.00	28.50
11390	CA	THR	B	661	-44.355	14.767	91.984	1.00	28.29
11391	CB	THR	B	661	-45.546	14.366	92.818	1.00	27.45
11392	OG1	THR	B	661	-46.535	15.387	92.715	1.00	29.47
11393	CG2	THR	B	661	-45.191	14.390	94.278	1.00	28.51
11394	C	THR	B	661	-44.840	15.193	90.634	1.00	27.58
11395	O	THR	B	661	-45.141	16.360	90.433	1.00	26.38
11396	N	VAL	B	662	-44.937	14.255	89.699	1.00	27.71
11397	CA	VAL	B	662	-45.468	14.649	88.413	1.00	27.87
11398	CB	VAL	B	662	-45.105	13.696	87.244	1.00	28.03
11399	CG1	VAL	B	662	-43.870	12.889	87.559	1.00	27.47
11400	CG2	VAL	B	662	-46.276	12.834	86.853	1.00	28.38
11401	C	VAL	B	662	-46.960	14.882	88.540	1.00	27.13
11402	O	VAL	B	662	-47.479	15.797	87.962	1.00	27.77
11403	N	MET	B	663	-47.633	14.082	89.342	1.00	27.99
11404	CA	MET	B	663	-49.089	14.201	89.497	1.00	28.23
11405	CB	MET	B	663	-49.606	13.268	90.587	1.00	27.98
11406	CG	MET	B	663	-49.700	11.811	90.119	1.00	29.16
11407	SD	MET	B	663	-48.064	11.094	89.939	1.00	28.55
11408	CE	MET	B	663	-47.730	10.581	91.585	1.00	25.42
11409	C	MET	B	663	-49.568	15.598	89.801	1.00	28.71
11410	O	MET	B	663	-50.646	15.979	89.386	1.00	28.82
11411	N	SER	B	664	-48.782	16.368	90.547	1.00	29.20
11412	CA	SER	B	664	-49.234	17.699	90.904	1.00	29.56
11413	CB	SER	B	664	-48.417	18.268	92.069	1.00	29.71
11414	OG	SER	B	664	-47.127	18.659	91.638	1.00	30.83

FIGURE 3 HP

A	B	C	D	E	F	G	H	I	J
11415	C	SER	B	664	-49.201	18.630	89.690	1.00	29.03
11416	O	SER	B	664	-49.812	19.694	89.691	1.00	29.19
11417	N	ARG	B	665	-48.511	18.223	88.642	1.00	28.31
11418	CA	ARG	B	665	-48.440	19.072	87.452	1.00	27.87
11419	CB	ARG	B	665	-47.017	19.073	86.876	1.00	28.19
11420	CG	ARG	B	665	-45.941	19.442	87.920	1.00	27.90
11421	CD	ARG	B	665	-44.509	19.413	87.389	1.00	30.07
11422	NE	ARG	B	665	-43.613	20.173	88.261	1.00	30.26
11423	CZ	ARG	B	665	-42.526	20.811	87.849	1.00	29.50
11424	NH1	ARG	B	665	-42.166	20.784	86.574	1.00	25.52
11425	NH2	ARG	B	665	-41.786	21.479	88.730	1.00	32.36
11426	C	ARG	B	665	-49.448	18.636	86.408	1.00	27.44
11427	O	ARG	B	665	-49.492	19.183	85.330	1.00	26.97
11428	N	ALA	B	666	-50.289	17.675	86.755	1.00	27.53
11429	CA	ALA	B	666	-51.249	17.122	85.789	1.00	28.54
11430	CB	ALA	B	666	-52.321	16.312	86.519	1.00	27.96
11431	C	ALA	B	666	-51.902	18.154	84.876	1.00	28.92
11432	O	ALA	B	666	-51.965	17.975	83.656	1.00	28.75
11433	N	GLU	B	667	-52.402	19.226	85.483	1.00	29.98
11434	CA	GLU	B	667	-53.146	20.267	84.772	1.00	31.08
11435	CB	GLU	B	667	-53.572	21.367	85.753	1.00	31.61
11436	CG	GLU	B	667	-54.269	22.549	85.102	1.00	35.39
11437	CD	GLU	B	667	-55.606	22.180	84.483	1.00	41.19
11438	OE1	GLU	B	667	-55.922	22.736	83.410	1.00	43.54
11439	OE2	GLU	B	667	-56.348	21.345	85.070	1.00	43.87
11440	C	GLU	B	667	-52.391	20.848	83.587	1.00	30.55
11441	O	GLU	B	667	-52.954	21.052	82.530	1.00	31.52
11442	N	ASN	B	668	-51.107	21.090	83.752	1.00	30.46
11443	CA	ASN	B	668	-50.293	21.592	82.659	1.00	30.47
11444	CB	ASN	B	668	-48.925	21.999	83.174	1.00	30.94
11445	CG	ASN	B	668	-48.975	23.254	84.007	1.00	31.79
11446	OD1	ASN	B	668	-49.999	23.935	84.059	1.00	31.89
11447	ND2	ASN	B	668	-47.871	23.559	84.679	1.00	33.36
11448	C	ASN	B	668	-50.078	20.672	81.467	1.00	30.20
11449	O	ASN	B	668	-49.478	21.104	80.491	1.00	29.59
11450	N	PHE	B	669	-50.523	19.416	81.548	1.00	30.18
11451	CA	PHE	B	669	-50.333	18.472	80.449	1.00	30.59
11452	CB	PHE	B	669	-50.454	17.016	80.922	1.00	30.47
11453	CG	PHE	B	669	-49.197	16.461	81.550	1.00	30.43
11454	CD1	PHE	B	669	-48.851	16.784	82.853	1.00	29.28
11455	CE1	PHE	B	669	-47.707	16.268	83.431	1.00	29.56
11456	CZ	PHE	B	669	-46.886	15.411	82.708	1.00	29.46
11457	CE2	PHE	B	669	-47.223	15.084	81.404	1.00	31.42
11458	CD2	PHE	B	669	-48.367	15.604	80.834	1.00	29.78
11459	C	PHE	B	669	-51.341	18.778	79.351	1.00	31.27
11460	O	PHE	B	669	-51.230	18.280	78.237	1.00	30.77
11461	N	LYS	B	670	-52.311	19.634	79.670	1.00	32.49
11462	CA	LYS	B	670	-53.277	20.102	78.686	1.00	33.59
11463	CB	LYS	B	670	-54.122	21.234	79.263	1.00	34.38
11464	CG	LYS	B	670	-55.602	20.927	79.421	1.00	36.88
11465	CD	LYS	B	670	-55.941	20.640	80.878	1.00	38.81

FIGURE 3 HQ

A	B	C	D	E	F	G	H	I	J
11466	CE	LYS	B	708	-57.403	20.289	81.032	1.00	40.91
11467	NZ	LYS	B	708	-57.968	20.918	82.253	1.00	42.43
11468	C	LYS	B	708	-52.578	20.668	77.480	1.00	33.88
11469	O	LYS	B	708	-53.119	20.639	76.377	1.00	34.54
11470	N	GLN	B	709	-51.377	21.196	77.695	1.00	33.98
11471	CA	GLN	B	709	-50.638	21.898	76.651	1.00	34.19
11472	CB	GLN	B	709	-49.692	22.932	77.284	1.00	34.36
11473	CG	GLN	B	709	-50.340	23.839	78.322	1.00	37.40
11474	CD	GLN	B	709	-49.355	24.829	78.946	1.00	42.07
11475	OE1	GLN	B	709	-48.527	25.430	78.238	1.00	43.94
11476	NE2	GLN	B	709	-49.447	25.008	80.267	1.00	42.23
11477	C	GLN	B	709	-49.808	21.013	75.732	1.00	33.69
11478	O	GLN	B	709	-49.307	21.488	74.713	1.00	34.21
11479	N	VAL	B	710	-49.633	19.745	76.091	1.00	32.52
11480	CA	VAL	B	710	-48.741	18.901	75.328	1.00	31.33
11481	CB	VAL	B	710	-47.445	18.642	76.125	1.00	32.01
11482	CG1	VAL	B	710	-46.686	19.941	76.396	1.00	30.83
11483	CG2	VAL	B	710	-47.759	17.933	77.421	1.00	31.20
11484	C	VAL	B	710	-49.321	17.542	74.964	1.00	30.81
11485	O	VAL	B	710	-50.338	17.100	75.516	1.00	29.98
11486	N	GLU	B	711	-48.662	16.901	74.005	1.00	30.01
11487	CA	GLU	B	711	-48.973	15.532	73.616	1.00	29.65
11488	CB	GLU	B	711	-48.823	15.371	72.104	1.00	30.55
11489	CG	GLU	B	711	-50.015	15.902	71.314	1.00	35.63
11490	CD	GLU	B	711	-49.669	16.234	69.871	1.00	42.70
11491	OE1	GLU	B	711	-49.877	15.365	68.986	1.00	44.03
11492	OE2	GLU	B	711	-49.190	17.373	69.620	1.00	45.75
11493	C	GLU	B	711	-48.000	14.638	74.379	1.00	27.71
11494	O	GLU	B	711	-46.790	14.775	74.266	1.00	27.36
11495	N	TYR	B	712	-48.543	13.725	75.161	1.00	26.17
11496	CA	TYR	B	712	-47.763	12.905	76.068	1.00	24.90
11497	CB	TYR	B	712	-48.220	13.252	77.458	1.00	23.69
11498	CG	TYR	B	712	-47.605	12.551	78.626	1.00	22.24
11499	CD1	TYR	B	712	-46.241	12.562	78.849	1.00	21.50
11500	CE1	TYR	B	712	-45.699	11.983	79.987	1.00	19.22
11501	CZ	TYR	B	712	-46.521	11.404	80.909	1.00	20.30
11502	OH	TYR	B	712	-46.015	10.826	82.039	1.00	21.46
11503	CE2	TYR	B	712	-47.875	11.386	80.719	1.00	22.28
11504	CD2	TYR	B	712	-48.411	11.974	79.591	1.00	22.47
11505	C	TYR	B	712	-48.043	11.435	75.866	1.00	24.60
11506	O	TYR	B	712	-49.207	11.039	75.779	1.00	24.93
11507	N	LEU	B	713	-46.978	10.637	75.847	1.00	23.30
11508	CA	LEU	B	713	-47.082	9.193	75.696	1.00	22.85
11509	CB	LEU	B	713	-46.382	8.722	74.417	1.00	22.22
11510	CG	LEU	B	713	-46.110	7.220	74.296	1.00	21.35
11511	CD1	LEU	B	713	-47.389	6.386	74.450	1.00	19.40
11512	CD2	LEU	B	713	-45.445	6.946	72.952	1.00	20.50
11513	C	LEU	B	713	-46.438	8.553	76.914	1.00	22.62
11514	O	LEU	B	713	-45.286	8.794	77.185	1.00	22.85
11515	N	LEU	B	714	-47.210	7.749	77.641	1.00	22.40
11516	CA	LEU	B	714	-46.799	7.165	78.892	1.00	22.33

FIGURE 3 HR

A	B	C	D	E	F	G	H	I	J
11517	CB	LEU	B	676	-47.836	7.535	79.959	1.00	21.80
11518	CG	LEU	B	676	-47.637	6.916	81.355	1.00	22.36
11519	CD1	LEU	B	676	-48.763	7.329	82.268	1.00	22.97
11520	CD2	LEU	B	676	-46.293	7.293	81.973	1.00	19.55
11521	C	LEU	B	676	-46.651	5.633	78.748	1.00	22.40
11522	O	LEU	B	676	-47.599	4.936	78.368	1.00	23.59
11523	N	ILE	B	677	-45.465	5.119	79.034	1.00	21.89
11524	CA	ILE	B	677	-45.191	3.694	78.857	1.00	21.46
11525	CB	ILE	B	677	-44.180	3.514	77.735	1.00	21.56
11526	CG1	ILE	B	677	-44.697	4.172	76.463	1.00	20.48
11527	CD1	ILE	B	677	-43.713	4.108	75.327	1.00	22.71
11528	CG2	ILE	B	677	-43.876	2.041	77.544	1.00	19.66
11529	C	ILE	B	677	-44.608	3.055	80.089	1.00	21.16
11530	O	ILE	B	677	-43.749	3.632	80.729	1.00	22.03
11531	N	HIS	B	678	-45.056	1.859	80.422	1.00	21.16
11532	CA	HIS	B	678	-44.548	1.208	81.613	1.00	21.16
11533	CB	HIS	B	678	-45.262	1.774	82.848	1.00	20.85
11534	CG	HIS	B	678	-44.387	1.869	84.052	1.00	20.59
11535	ND1	HIS	B	678	-43.817	0.764	84.642	1.00	22.12
11536	CE1	HIS	B	678	-43.087	1.145	85.676	1.00	23.15
11537	NE2	HIS	B	678	-43.158	2.462	85.771	1.00	25.82
11538	CD2	HIS	B	678	-43.971	2.940	84.770	1.00	21.07
11539	C	HIS	B	678	-44.767	-0.298	81.548	1.00	21.06
11540	O	HIS	B	678	-45.797	-0.750	81.051	1.00	21.04
11541	N	GLY	B	679	-43.818	-1.073	82.072	1.00	20.72
11542	CA	GLY	B	679	-43.981	-2.512	82.086	1.00	20.65
11543	C	GLY	B	679	-44.753	-2.895	83.326	1.00	21.24
11544	O	GLY	B	679	-44.522	-2.338	84.403	1.00	21.36
11545	N	THR	B	680	-45.656	-3.858	83.216	1.00	21.21
11546	CA	THR	B	680	-46.439	-4.189	84.384	1.00	21.71
11547	CB	THR	B	680	-47.714	-4.958	84.010	1.00	22.25
11548	OG1	THR	B	680	-47.377	-6.256	83.499	1.00	20.42
11549	CG2	THR	B	680	-48.435	-4.238	82.863	1.00	20.27
11550	C	THR	B	680	-45.659	-4.920	85.468	1.00	22.64
11551	O	THR	B	680	-46.084	-4.924	86.646	1.00	23.38
11552	N	ALA	B	681	-44.535	-5.536	85.094	1.00	22.23
11553	CA	ALA	B	681	-43.735	-6.284	86.057	1.00	21.88
11554	CB	ALA	B	681	-43.446	-7.693	85.517	1.00	22.40
11555	C	ALA	B	681	-42.425	-5.557	86.396	1.00	22.23
11556	O	ALA	B	681	-41.370	-6.188	86.623	1.00	21.47
11557	N	ASP	B	682	-42.484	-4.230	86.378	1.00	21.85
11558	CA	ASP	B	682	-41.322	-3.435	86.711	1.00	22.43
11559	CB	ASP	B	682	-41.469	-2.007	86.192	1.00	22.15
11560	CG	ASP	B	682	-40.188	-1.243	86.262	1.00	22.54
11561	OD1	ASP	B	682	-39.992	-0.307	85.432	1.00	19.13
11562	OD2	ASP	B	682	-39.315	-1.527	87.131	1.00	24.17
11563	C	ASP	B	682	-41.107	-3.488	88.226	1.00	22.44
11564	O	ASP	B	682	-41.922	-2.991	88.997	1.00	22.84
11565	N	ASP	B	683	-40.036	-4.161	88.635	1.00	22.29
11566	CA	ASP	B	683	-39.717	-4.368	90.044	1.00	22.46
11567	CB	ASP	B	683	-38.888	-5.636	90.193	1.00	22.70

FIGURE 3 HS

A	B	C	D	E	F	G	H	I	J
11568	CG	ASP	B	683	-37.609	-5.580	89.379	1.00	21.98
11569	OD1	ASP	B	683	-37.661	-5.817	88.142	1.00	21.50
11570	OD2	ASP	B	683	-36.515	-5.289	89.890	1.00	19.87
11571	C	ASP	B	683	-38.892	-3.221	90.593	1.00	22.43
11572	O	ASP	B	683	-38.692	-3.113	91.800	1.00	22.89
11573	N	ASN	B	684	-38.416	-2.377	89.691	1.00	22.67
11574	CA	ASN	B	684	-37.600	-1.224	90.030	1.00	22.77
11575	CB	ASN	B	684	-36.557	-1.018	88.946	1.00	22.51
11576	CG	ASN	B	684	-35.395	-0.215	89.429	1.00	24.70
11577	OD1	ASN	B	684	-34.256	-0.429	89.002	1.00	25.50
11578	ND2	ASN	B	684	-35.664	0.720	90.342	1.00	25.07
11579	C	ASN	B	684	-38.447	0.051	90.211	1.00	22.72
11580	O	ASN	B	684	-38.626	0.521	91.326	1.00	21.14
11581	N	VAL	B	685	-38.927	0.647	89.118	1.00	22.57
11582	CA	VAL	B	685	-39.903	1.715	89.304	1.00	22.58
11583	CB	VAL	B	685	-39.587	3.007	88.549	1.00	22.83
11584	CG1	VAL	B	685	-38.130	3.053	88.203	1.00	21.94
11585	CG2	VAL	B	685	-40.443	3.173	87.359	1.00	24.06
11586	C	VAL	B	685	-41.259	1.097	89.001	1.00	22.01
11587	O	VAL	B	685	-41.574	0.713	87.893	1.00	22.70
11588	N	HIS	B	686	-42.024	0.935	90.050	1.00	21.89
11589	CA	HIS	B	686	-43.258	0.196	89.990	1.00	22.12
11590	CB	HIS	B	686	-43.769	-0.013	91.408	1.00	21.20
11591	CG	HIS	B	686	-42.743	-0.645	92.284	1.00	21.37
11592	ND1	HIS	B	686	-42.659	-0.411	93.640	1.00	21.73
11593	CE1	HIS	B	686	-41.641	-1.096	94.136	1.00	22.17
11594	NE2	HIS	B	686	-41.052	-1.750	93.147	1.00	20.29
11595	CD2	HIS	B	686	-41.718	-1.479	91.977	1.00	20.36
11596	C	HIS	B	686	-44.270	0.798	89.059	1.00	21.76
11597	O	HIS	B	686	-44.334	2.003	88.897	1.00	21.68
11598	N	PHE	B	687	-45.026	-0.078	88.413	1.00	22.26
11599	CA	PHE	B	687	-46.042	0.330	87.460	1.00	22.39
11600	CB	PHE	B	687	-46.831	-0.887	87.014	1.00	22.17
11601	CG	PHE	B	687	-47.881	-0.572	86.006	1.00	22.72
11602	CD1	PHE	B	687	-47.545	-0.436	84.666	1.00	21.38
11603	CE1	PHE	B	687	-48.499	-0.142	83.740	1.00	21.54
11604	CZ	PHE	B	687	-49.826	0.044	84.141	1.00	21.45
11605	CE2	PHE	B	687	-50.172	-0.076	85.467	1.00	21.25
11606	CD2	PHE	B	687	-49.203	-0.393	86.398	1.00	21.37
11607	C	PHE	B	687	-46.957	1.328	88.139	1.00	22.85
11608	O	PHE	B	687	-47.563	2.191	87.485	1.00	22.91
11609	N	GLN	B	688	-47.007	1.191	89.466	1.00	23.57
11610	CA	GLN	B	688	-47.739	2.049	90.391	1.00	24.37
11611	CB	GLN	B	688	-47.237	1.790	91.824	1.00	24.04
11612	CG	GLN	B	688	-47.775	2.791	92.861	1.00	25.68
11613	CD	GLN	B	688	-46.957	2.851	94.149	1.00	26.71
11614	OE1	GLN	B	688	-45.749	2.652	94.143	1.00	27.21
11615	NE2	GLN	B	688	-47.625	3.115	95.252	1.00	28.39
11616	C	GLN	B	688	-47.489	3.501	90.050	1.00	24.16
11617	O	GLN	B	688	-48.390	4.319	89.960	1.00	24.28
11618	N	GLN	B	689	-46.227	3.780	89.833	1.00	24.39



FIGURE 3 HT

A	B	C	D	E	F	G	H	I	J
11619	CA	GLN	B	689	-45.716	5.111	89.555	1.00	24.90
11620	CB	GLN	B	689	-44.213	4.921	89.380	1.00	24.89
11621	CG	GLN	B	689	-43.351	6.093	89.446	1.00	29.13
11622	CD	GLN	B	689	-42.643	6.286	90.782	1.00	30.33
11623	OE1	GLN	B	689	-42.614	7.396	91.266	1.00	34.56
11624	NE2	GLN	B	689	-42.031	5.245	91.333	1.00	30.33
11625	C	GLN	B	689	-46.420	5.690	88.312	1.00	24.89
11626	O	GLN	B	689	-46.926	6.817	88.322	1.00	24.56
11627	N	SER	B	690	-46.503	4.910	87.241	1.00	24.52
11628	CA	SER	B	690	-47.227	5.386	86.062	1.00	24.06
11629	CB	SER	B	690	-46.801	4.653	84.797	1.00	23.60
11630	OG	SER	B	690	-45.753	5.350	84.176	1.00	24.82
11631	C	SER	B	690	-48.742	5.262	86.250	1.00	23.47
11632	O	SER	B	690	-49.495	6.037	85.702	1.00	23.46
11633	N	ALA	B	691	-49.188	4.297	87.035	1.00	22.97
11634	CA	ALA	B	691	-50.622	4.206	87.320	1.00	23.09
11635	CB	ALA	B	691	-50.913	2.993	88.171	1.00	21.96
11636	C	ALA	B	691	-51.164	5.490	87.992	1.00	23.33
11637	O	ALA	B	691	-52.297	5.891	87.758	1.00	23.06
11638	N	GLN	B	692	-50.358	6.115	88.848	1.00	23.59
11639	CA	GLN	B	692	-50.767	7.358	89.479	1.00	23.92
11640	CB	GLN	B	692	-50.005	7.608	90.777	1.00	23.48
11641	CG	GLN	B	692	-50.201	6.512	91.794	1.00	24.15
11642	CD	GLN	B	692	-51.483	6.655	92.580	1.00	23.96
11643	OE1	GLN	B	692	-52.332	7.479	92.254	1.00	23.98
11644	NE2	GLN	B	692	-51.630	5.845	93.618	1.00	24.58
11645	C	GLN	B	692	-50.637	8.540	88.539	1.00	23.75
11646	O	GLN	B	692	-51.447	9.466	88.600	1.00	24.89
11647	N	ILE	B	693	-49.661	8.534	87.646	1.00	23.63
11648	CA	ILE	B	693	-49.625	9.635	86.695	1.00	23.61
11649	CB	ILE	B	693	-48.448	9.547	85.729	1.00	23.53
11650	CG1	ILE	B	693	-47.132	9.755	86.446	1.00	22.66
11651	CD1	ILE	B	693	-45.967	9.319	85.588	1.00	19.56
11652	CG2	ILE	B	693	-48.568	10.607	84.642	1.00	22.24
11653	C	ILE	B	693	-50.908	9.594	85.898	1.00	24.18
11654	O	ILE	B	693	-51.605	10.579	85.813	1.00	24.84
11655	N	SER	B	694	-51.234	8.429	85.338	1.00	24.50
11656	CA	SER	B	694	-52.399	8.319	84.456	1.00	24.84
11657	CB	SER	B	694	-52.510	6.927	83.814	1.00	24.09
11658	OG	SER	B	694	-52.933	5.961	84.765	1.00	23.12
11659	C	SER	B	694	-53.683	8.687	85.172	1.00	24.78
11660	O	SER	B	694	-54.517	9.362	84.618	1.00	24.83
11661	N	LYS	B	695	-53.841	8.224	86.400	1.00	25.10
11662	CA	LYS	B	695	-55.038	8.536	87.162	1.00	25.16
11663	CB	LYS	B	695	-55.053	7.777	88.494	1.00	24.97
11664	CG	LYS	B	695	-56.173	8.181	89.449	1.00	24.11
11665	CD	LYS	B	695	-56.591	7.037	90.321	1.00	23.85
11666	CE	LYS	B	695	-55.439	6.603	91.228	1.00	26.36
11667	NZ	LYS	B	695	-54.961	7.687	92.144	1.00	26.44
11668	C	LYS	B	695	-55.132	10.048	87.387	1.00	25.98
11669	O	LYS	B	695	-56.220	10.615	87.364	1.00	26.20

FIGURE 3 HU

A	B	C	D	E	F	G	H	I	J
11670	N	ALA	B	696	-53.990	10.704	87.581	1.00	26.38
11671	CA	ALA	B	696	-53.991	12.151	87.789	1.00	26.38
11672	CB	ALA	B	696	-52.647	12.643	88.343	1.00	26.31
11673	C	ALA	B	696	-54.330	12.902	86.528	1.00	26.34
11674	O	ALA	B	696	-54.947	13.963	86.581	1.00	26.21
11675	N	LEU	B	697	-53.897	12.378	85.388	1.00	26.74
11676	CA	LEU	B	697	-54.185	13.035	84.123	1.00	26.97
11677	CB	LEU	B	697	-53.319	12.465	83.009	1.00	26.55
11678	CG	LEU	B	697	-51.812	12.726	83.104	1.00	27.21
11679	CD1	LEU	B	697	-51.087	11.965	82.023	1.00	26.23
11680	CD2	LEU	B	697	-51.490	14.191	82.979	1.00	25.07
11681	C	LEU	B	697	-55.676	12.884	83.783	1.00	27.52
11682	O	LEU	B	697	-56.294	13.756	83.155	1.00	27.46
11683	N	VAL	B	698	-56.255	11.774	84.221	1.00	27.87
11684	CA	VAL	B	698	-57.650	11.501	83.937	1.00	27.55
11685	CB	VAL	B	698	-57.975	10.027	84.251	1.00	27.83
11686	CG1	VAL	B	698	-59.498	9.805	84.293	1.00	25.37
11687	CG2	VAL	B	698	-57.290	9.114	83.225	1.00	24.42
11688	C	VAL	B	698	-58.495	12.392	84.806	1.00	28.67
11689	O	VAL	B	698	-59.501	12.963	84.358	1.00	29.44
11690	N	ASP	B	699	-58.071	12.508	86.053	1.00	28.50
11691	CA	ASP	B	699	-58.772	13.302	87.028	1.00	29.88
11692	CB	ASP	B	699	-58.153	13.104	88.414	1.00	29.83
11693	CG	ASP	B	699	-58.526	11.756	89.028	1.00	32.75
11694	OD1	ASP	B	699	-57.905	11.360	90.047	1.00	35.84
11695	OD2	ASP	B	699	-59.424	11.013	88.551	1.00	34.23
11696	C	ASP	B	699	-58.883	14.785	86.656	1.00	29.99
11697	O	ASP	B	699	-59.751	15.470	87.180	1.00	29.61
11698	N	VAL	B	700	-58.032	15.267	85.746	1.00	29.98
11699	CA	VAL	B	700	-58.128	16.666	85.306	1.00	30.33
11700	CB	VAL	B	700	-56.844	17.521	85.627	1.00	31.00
11701	CG1	VAL	B	700	-56.511	17.481	87.115	1.00	29.84
11702	CG2	VAL	B	700	-55.641	17.066	84.795	1.00	30.71
11703	C	VAL	B	700	-58.490	16.807	83.821	1.00	30.05
11704	O	VAL	B	700	-58.385	17.888	83.250	1.00	30.40
11705	N	GLY	B	701	-58.915	15.720	83.191	1.00	29.65
11706	CA	GLY	B	701	-59.385	15.797	81.816	1.00	28.66
11707	C	GLY	B	701	-58.343	16.017	80.740	1.00	28.50
11708	O	GLY	B	701	-58.616	16.656	79.710	1.00	29.25
11709	N	VAL	B	702	-57.144	15.497	80.938	1.00	27.69
11710	CA	VAL	B	702	-56.148	15.614	79.882	1.00	27.99
11711	CB	VAL	B	702	-54.795	16.145	80.393	1.00	27.91
11712	CG1	VAL	B	702	-54.651	15.831	81.835	1.00	30.45
11713	CG2	VAL	B	702	-53.636	15.576	79.583	1.00	27.98
11714	C	VAL	B	702	-56.008	14.286	79.157	1.00	27.58
11715	O	VAL	B	702	-55.928	13.218	79.777	1.00	27.62
11716	N	ASP	B	703	-56.035	14.362	77.838	1.00	26.84
11717	CA	ASP	B	703	-55.941	13.191	77.009	1.00	27.00
11718	CB	ASP	B	703	-56.685	13.401	75.689	1.00	26.61
11719	CG	ASP	B	703	-56.669	12.151	74.820	1.00	28.36
11720	OD1	ASP	B	703	-56.231	12.229	73.648	1.00	29.70

FIGURE 3 HV

A	B	C	D	E	F	G	H	I	J
11721	OD2	ASP	B	703	-57.050	11.037	75.242	1.00	28.34
11722	C	ASP	B	703	-54.468	12.927	76.741	1.00	26.68
11723	O	ASP	B	703	-53.685	13.868	76.562	1.00	27.08
11724	N	PHE	B	704	-54.086	11.656	76.706	1.00	25.57
11725	CA	PHE	B	704	-52.683	11.307	76.492	1.00	25.16
11726	CB	PHE	B	704	-51.912	11.325	77.829	1.00	24.13
11727	CG	PHE	B	704	-52.535	10.459	78.873	1.00	23.39
11728	CD1	PHE	B	704	-52.062	9.175	79.101	1.00	21.02
11729	CE1	PHE	B	704	-52.640	8.371	80.034	1.00	20.61
11730	CZ	PHE	B	704	-53.741	8.822	80.761	1.00	20.93
11731	CE2	PHE	B	704	-54.237	10.090	80.538	1.00	21.66
11732	CD2	PHE	B	704	-53.638	10.905	79.590	1.00	21.85
11733	C	PHE	B	704	-52.655	9.919	75.907	1.00	25.36
11734	O	PHE	B	704	-53.671	9.236	75.908	1.00	25.18
11735	N	GLN	B	705	-51.496	9.505	75.406	1.00	25.90
11736	CA	GLN	B	705	-51.319	8.160	74.871	1.00	26.19
11737	CB	GLN	B	705	-50.410	8.200	73.660	1.00	26.63
11738	CG	GLN	B	705	-50.825	9.215	72.654	1.00	30.83
11739	CD	GLN	B	705	-52.008	8.760	71.880	1.00	34.97
11740	OE1	GLN	B	705	-53.039	9.419	71.884	1.00	37.84
11741	NE2	GLN	B	705	-51.870	7.627	71.194	1.00	38.25
11742	C	GLN	B	705	-50.667	7.261	75.904	1.00	25.75
11743	O	GLN	B	705	-49.761	7.691	76.617	1.00	25.97
11744	N	ALA	B	706	-51.104	6.010	75.973	1.00	24.70
11745	CA	ALA	B	706	-50.492	5.076	76.906	1.00	24.31
11746	CB	ALA	B	706	-51.415	4.830	78.101	1.00	23.90
11747	C	ALA	B	706	-50.139	3.746	76.240	1.00	23.82
11748	O	ALA	B	706	-50.665	3.390	75.192	1.00	23.72
11749	N	MET	B	707	-49.202	3.041	76.851	1.00	23.07
11750	CA	MET	B	707	-48.905	1.680	76.481	1.00	21.51
11751	CB	MET	B	707	-47.860	1.633	75.378	1.00	22.13
11752	CG	MET	B	707	-47.485	0.215	74.945	1.00	21.18
11753	SD	MET	B	707	-48.900	-0.708	74.359	1.00	21.84
11754	CE	MET	B	707	-49.333	0.205	72.848	1.00	20.68
11755	C	MET	B	707	-48.381	0.983	77.711	1.00	21.21
11756	O	MET	B	707	-47.397	1.420	78.309	1.00	20.81
11757	N	TRP	B	708	-49.043	-0.092	78.124	1.00	20.75
11758	CA	TRP	B	708	-48.482	-0.906	79.182	1.00	20.19
11759	CB	TRP	B	708	-49.562	-1.433	80.127	1.00	19.59
11760	CG	TRP	B	708	-50.393	-2.489	79.545	1.00	20.81
11761	CD1	TRP	B	708	-50.052	-3.802	79.386	1.00	21.15
11762	NE1	TRP	B	708	-51.083	-4.485	78.793	1.00	20.70
11763	CE2	TRP	B	708	-52.116	-3.615	78.552	1.00	19.88
11764	CD2	TRP	B	708	-51.716	-2.350	79.011	1.00	20.38
11765	CE3	TRP	B	708	-52.614	-1.275	78.884	1.00	19.56
11766	CZ3	TRP	B	708	-53.837	-1.500	78.317	1.00	19.59
11767	CH2	TRP	B	708	-54.209	-2.782	77.868	1.00	19.43
11768	CZ2	TRP	B	708	-53.368	-3.845	77.979	1.00	19.34
11769	C	TRP	B	708	-47.779	-2.035	78.447	1.00	20.09
11770	O	TRP	B	708	-48.099	-2.289	77.290	1.00	19.23
11771	N	TYR	B	709	-46.797	-2.667	79.093	1.00	20.28

FIGURE 3 HW

A	B	C	D	E	F	G	H	I	J
11772	CA	TYR	B	709	-46.100	-3.838	78.526	1.00	20.63
11773	CB	TYR	B	709	-44.627	-3.558	78.185	1.00	20.56
11774	CG	TYR	B	709	-44.559	-2.898	76.860	1.00	19.84
11775	CD1	TYR	B	709	-44.767	-3.636	75.697	1.00	20.28
11776	CE1	TYR	B	709	-44.775	-3.035	74.461	1.00	19.85
11777	CZ	TYR	B	709	-44.565	-1.685	74.371	1.00	19.86
11778	OH	TYR	B	709	-44.574	-1.101	73.136	1.00	22.81
11779	CE2	TYR	B	709	-44.349	-0.923	75.504	1.00	20.72
11780	CD2	TYR	B	709	-44.356	-1.533	76.750	1.00	20.59
11781	C	TYR	B	709	-46.226	-4.983	79.484	1.00	20.70
11782	O	TYR	B	709	-45.549	-5.038	80.518	1.00	21.14
11783	N	THR	B	710	-47.137	-5.883	79.141	1.00	21.25
11784	CA	THR	B	710	-47.445	-7.024	79.962	1.00	21.25
11785	CB	THR	B	710	-48.380	-7.953	79.229	1.00	21.37
11786	OG1	THR	B	710	-49.648	-7.307	79.012	1.00	23.03
11787	CG2	THR	B	710	-48.689	-9.129	80.132	1.00	20.84
11788	C	THR	B	710	-46.209	-7.831	80.348	1.00	21.64
11789	O	THR	B	710	-45.524	-8.376	79.485	1.00	20.62
11790	N	ASP	B	711	-45.962	-7.910	81.658	1.00	21.81
11791	CA	ASP	B	711	-44.898	-8.742	82.220	1.00	21.69
11792	CB	ASP	B	711	-45.033	-10.195	81.760	1.00	21.54
11793	CG	ASP	B	711	-46.143	-10.910	82.466	1.00	22.07
11794	OD1	ASP	B	711	-46.391	-12.086	82.139	1.00	25.01
11795	OD2	ASP	B	711	-46.829	-10.388	83.367	1.00	22.35
11796	C	ASP	B	711	-43.514	-8.254	81.928	1.00	21.52
11797	O	ASP	B	711	-42.540	-8.946	82.237	1.00	21.95
11798	N	GLU	B	712	-43.391	-7.084	81.320	1.00	21.74
11799	CA	GLU	B	712	-42.044	-6.549	81.114	1.00	22.19
11800	CB	GLU	B	712	-41.981	-5.609	79.929	1.00	22.12
11801	CG	GLU	B	712	-42.177	-6.311	78.603	1.00	23.30
11802	CD	GLU	B	712	-41.056	-7.288	78.295	1.00	24.89
11803	OE1	GLU	B	712	-41.288	-8.517	78.332	1.00	24.79
11804	OE2	GLU	B	712	-39.940	-6.828	77.996	1.00	26.46
11805	C	GLU	B	712	-41.557	-5.842	82.378	1.00	22.56
11806	O	GLU	B	712	-42.365	-5.440	83.211	1.00	22.17
11807	N	ASP	B	713	-40.237	-5.715	82.529	1.00	23.00
11808	CA	ASP	B	713	-39.697	-5.030	83.696	1.00	23.22
11809	CB	ASP	B	713	-38.779	-5.928	84.524	1.00	22.79
11810	CG	ASP	B	713	-37.508	-6.282	83.814	1.00	23.44
11811	OD1	ASP	B	713	-36.781	-7.146	84.337	1.00	26.49
11812	OD2	ASP	B	713	-37.115	-5.729	82.771	1.00	23.72
11813	C	ASP	B	713	-39.069	-3.705	83.306	1.00	23.04
11814	O	ASP	B	713	-39.365	-3.180	82.246	1.00	22.35
11815	N	HIS	B	714	-38.218	-3.163	84.168	1.00	23.71
11816	CA	HIS	B	714	-37.661	-1.825	83.958	1.00	24.48
11817	CB	HIS	B	714	-36.754	-1.429	85.132	1.00	24.46
11818	CG	HIS	B	714	-36.548	0.048	85.238	1.00	25.34
11819	ND1	HIS	B	714	-37.591	0.944	85.168	1.00	26.61
11820	CE1	HIS	B	714	-37.126	2.171	85.268	1.00	25.20
11821	NE2	HIS	B	714	-35.816	2.107	85.401	1.00	27.88
11822	CD2	HIS	B	714	-35.426	0.790	85.370	1.00	27.76

FIGURE 3 HX

A	B	C	D	E	F	G	H	I	J
11823	C	HIS	B	714	-36.938	-1.613	82.639	1.00	24.78
11824	O	HIS	B	714	-36.947	-0.524	82.089	1.00	25.49
11825	N	GLY	B	715	-36.297	-2.653	82.123	1.00	25.54
11826	CA	GLY	B	715	-35.611	-2.519	80.855	1.00	25.38
11827	C	GLY	B	715	-36.467	-2.725	79.611	1.00	25.11
11828	O	GLY	B	715	-36.037	-2.346	78.533	1.00	24.63
11829	N	ILE	B	716	-37.669	-3.297	79.762	1.00	25.14
11830	CA	ILE	B	716	-38.542	-3.599	78.625	1.00	25.32
11831	CB	ILE	B	716	-39.311	-2.336	78.151	1.00	25.99
11832	CG1	ILE	B	716	-40.025	-1.689	79.353	1.00	25.69
11833	CD1	ILE	B	716	-40.970	-0.580	78.995	1.00	25.63
11834	CG2	ILE	B	716	-40.290	-2.705	77.023	1.00	22.30
11835	C	ILE	B	716	-37.675	-4.115	77.519	1.00	26.05
11836	O	ILE	B	716	-37.685	-3.606	76.395	1.00	26.00
11837	N	ALA	B	717	-36.932	-5.159	77.851	1.00	27.17
11838	CA	ALA	B	717	-35.891	-5.655	76.982	1.00	28.36
11839	CB	ALA	B	717	-34.554	-5.691	77.758	1.00	29.30
11840	C	ALA	B	717	-36.146	-6.995	76.307	1.00	29.08
11841	O	ALA	B	717	-35.255	-7.502	75.629	1.00	29.47
11842	N	SER	B	718	-37.314	-7.604	76.511	1.00	28.91
11843	CA	SER	B	718	-37.601	-8.795	75.737	1.00	29.39
11844	CB	SER	B	718	-39.074	-9.196	75.878	1.00	29.52
11845	OG	SER	B	718	-39.357	-9.608	77.204	1.00	34.20
11846	C	SER	B	718	-37.356	-8.409	74.293	1.00	28.23
11847	O	SER	B	718	-37.622	-7.288	73.891	1.00	29.25
11848	N	SER	B	719	-36.893	-9.333	73.482	1.00	27.65
11849	CA	SER	B	719	-36.711	-9.023	72.065	1.00	27.04
11850	CB	SER	B	719	-36.265	-10.261	71.277	1.00	27.06
11851	OG	SER	B	719	-36.278	-9.967	69.882	1.00	29.49
11852	C	SER	B	719	-37.959	-8.400	71.411	1.00	25.40
11853	O	SER	B	719	-37.870	-7.392	70.750	1.00	25.93
11854	N	THR	B	720	-39.123	-8.993	71.585	1.00	24.04
11855	CA	THR	B	720	-40.297	-8.452	70.913	1.00	22.83
11856	CB	THR	B	720	-41.410	-9.492	70.864	1.00	23.35
11857	OG1	THR	B	720	-41.764	-9.841	72.211	1.00	21.44
11858	CG2	THR	B	720	-40.905	-10.789	70.212	1.00	21.97
11859	C	THR	B	720	-40.859	-7.182	71.539	1.00	22.49
11860	O	THR	B	720	-41.493	-6.385	70.854	1.00	21.74
11861	N	ALA	B	721	-40.657	-7.006	72.837	1.00	21.92
11862	CA	ALA	B	721	-41.153	-5.822	73.494	1.00	21.78
11863	CB	ALA	B	721	-41.192	-6.010	74.993	1.00	21.88
11864	C	ALA	B	721	-40.238	-4.687	73.135	1.00	21.73
11865	O	ALA	B	721	-40.673	-3.570	72.946	1.00	22.65
11866	N	HIS	B	722	-38.954	-4.972	73.026	1.00	21.57
11867	CA	HIS	B	722	-38.021	-3.930	72.682	1.00	21.04
11868	CB	HIS	B	722	-36.600	-4.479	72.664	1.00	21.05
11869	CG	HIS	B	722	-35.612	-3.558	72.039	1.00	19.68
11870	ND1	HIS	B	722	-35.006	-2.538	72.737	1.00	22.51
11871	CE1	HIS	B	722	-34.161	-1.902	71.937	1.00	21.88
11872	NE2	HIS	B	722	-34.209	-2.469	70.744	1.00	21.58
11873	CD2	HIS	B	722	-35.105	-3.511	70.783	1.00	21.16

FIGURE 3 HY

A	B	C	D	E	F	G	H	I	J
11874	C	HIS	B	722	-38.358	-3.346	71.324	1.00	20.87
11875	O	HIS	B	722	-38.406	-2.134	71.153	1.00	19.87
11876	N	GLN	B	723	-38.578	-4.225	70.352	1.00	21.21
11877	CA	GLN	B	723	-38.908	-3.790	69.000	1.00	21.55
11878	CB	GLN	B	723	-38.942	-4.997	68.076	1.00	21.92
11879	CG	GLN	B	723	-37.624	-5.736	68.007	1.00	22.78
11880	CD	GLN	B	723	-37.721	-6.987	67.167	1.00	24.29
11881	OE1	GLN	B	723	-38.058	-6.918	65.984	1.00	27.58
11882	NE2	GLN	B	723	-37.435	-8.132	67.769	1.00	21.70
11883	C	GLN	B	723	-40.249	-3.057	68.943	1.00	21.47
11884	O	GLN	B	723	-40.413	-2.103	68.184	1.00	21.50
11885	N	HIS	B	724	-41.188	-3.491	69.778	1.00	20.78
11886	CA	HIS	B	724	-42.523	-2.911	69.812	1.00	20.65
11887	CB	HIS	B	724	-43.445	-3.800	70.654	1.00	20.00
11888	CG	HIS	B	724	-44.902	-3.560	70.418	1.00	18.84
11889	ND1	HIS	B	724	-45.612	-2.569	71.064	1.00	19.92
11890	CE1	HIS	B	724	-46.866	-2.585	70.645	1.00	17.53
11891	NE2	HIS	B	724	-46.996	-3.565	69.771	1.00	17.21
11892	CD2	HIS	B	724	-45.787	-4.191	69.615	1.00	15.78
11893	C	HIS	B	724	-42.533	-1.503	70.409	1.00	21.09
11894	O	HIS	B	724	-43.173	-0.603	69.870	1.00	21.79
11895	N	ILE	B	725	-41.853	-1.306	71.533	1.00	20.56
11896	CA	ILE	B	725	-41.890	0.014	72.136	1.00	20.54
11897	CB	ILE	B	725	-41.319	0.009	73.561	1.00	20.29
11898	CG1	ILE	B	725	-41.542	1.368	74.222	1.00	18.92
11899	CD1	ILE	B	725	-40.936	1.452	75.618	1.00	20.02
11900	CG2	ILE	B	725	-39.827	-0.372	73.551	1.00	20.46
11901	C	ILE	B	725	-41.211	1.045	71.221	1.00	20.60
11902	O	ILE	B	725	-41.759	2.115	70.991	1.00	20.39
11903	N	TYR	B	726	-40.055	0.702	70.661	1.00	20.43
11904	CA	TYR	B	726	-39.371	1.603	69.741	1.00	20.55
11905	CB	TYR	B	726	-37.958	1.100	69.426	1.00	20.49
11906	CG	TYR	B	726	-37.053	1.454	70.565	1.00	21.28
11907	CD1	TYR	B	726	-36.745	0.525	71.568	1.00	20.93
11908	CE1	TYR	B	726	-35.961	0.897	72.636	1.00	22.34
11909	CZ	TYR	B	726	-35.494	2.211	72.700	1.00	22.45
11910	OH	TYR	B	726	-34.705	2.628	73.723	1.00	24.15
11911	CE2	TYR	B	726	-35.813	3.128	71.742	1.00	20.64
11912	CD2	TYR	B	726	-36.594	2.765	70.706	1.00	19.99
11913	C	TYR	B	726	-40.195	1.857	68.482	1.00	20.85
11914	O	TYR	B	726	-40.174	2.961	67.917	1.00	21.68
11915	N	THR	B	727	-40.940	0.844	68.065	1.00	20.74
11916	CA	THR	B	727	-41.820	0.970	66.927	1.00	20.32
11917	CB	THR	B	727	-42.397	-0.412	66.508	1.00	20.53
11918	OG1	THR	B	727	-41.372	-1.229	65.929	1.00	20.62
11919	CG2	THR	B	727	-43.383	-0.250	65.341	1.00	18.90
11920	C	THR	B	727	-42.943	1.913	67.344	1.00	20.94
11921	O	THR	B	727	-43.314	2.827	66.605	1.00	20.27
11922	N	HIS	B	728	-43.480	1.698	68.545	1.00	21.17
11923	CA	HIS	B	728	-44.569	2.530	69.002	1.00	21.72
11924	CB	HIS	B	728	-45.181	1.959	70.268	1.00	21.45

FIGURE 3 HZ

A	B	C	D	E	F	G	H	I	J
11925	CG	HIS	B	728	-46.580	2.430	70.509	1.00	21.44
11926	ND1	HIS	B	728	-47.604	2.170	69.625	1.00	20.01
11927	CE1	HIS	B	728	-48.719	2.716	70.075	1.00	19.80
11928	NE2	HIS	B	728	-48.451	3.329	71.218	1.00	19.19
11929	CD2	HIS	B	728	-47.117	3.179	71.503	1.00	19.94
11930	C	HIS	B	728	-44.111	3.986	69.219	1.00	22.77
11931	O	HIS	B	728	-44.811	4.943	68.879	1.00	23.12
11932	N	MET	B	729	-42.919	4.158	69.772	1.00	23.36
11933	CA	MET	B	729	-42.424	5.505	69.999	1.00	23.86
11934	CB	MET	B	729	-41.213	5.471	70.930	1.00	23.04
11935	CG	MET	B	729	-41.611	5.015	72.310	1.00	24.70
11936	SD	MET	B	729	-40.337	5.244	73.518	1.00	27.86
11937	CE	MET	B	729	-39.049	4.336	72.788	1.00	24.03
11938	C	MET	B	729	-42.133	6.255	68.699	1.00	23.07
11939	O	MET	B	729	-42.338	7.458	68.616	1.00	23.08
11940	N	SER	B	730	-41.654	5.554	67.685	1.00	23.19
11941	CA	SER	B	730	-41.398	6.236	66.430	1.00	23.64
11942	CB	SER	B	730	-40.686	5.335	65.445	1.00	23.27
11943	OG	SER	B	730	-39.613	4.679	66.084	1.00	22.94
11944	C	SER	B	730	-42.665	6.817	65.805	1.00	24.48
11945	O	SER	B	730	-42.638	7.933	65.276	1.00	25.05
11946	N	HIS	B	731	-43.772	6.082	65.871	1.00	25.18
11947	CA	HIS	B	731	-45.017	6.579	65.300	1.00	26.18
11948	CB	HIS	B	731	-46.156	5.573	65.425	1.00	26.41
11949	CG	HIS	B	731	-46.022	4.376	64.543	1.00	29.11
11950	ND1	HIS	B	731	-46.233	3.095	65.005	1.00	31.92
11951	CE1	HIS	B	731	-46.058	2.234	64.018	1.00	32.79
11952	NE2	HIS	B	731	-45.750	2.913	62.927	1.00	34.46
11953	CD2	HIS	B	731	-45.725	4.256	63.229	1.00	32.74
11954	C	HIS	B	731	-45.443	7.792	66.064	1.00	25.82
11955	O	HIS	B	731	-45.874	8.763	65.485	1.00	26.25
11956	N	PHE	B	732	-45.378	7.708	67.380	1.00	26.04
11957	CA	PHE	B	732	-45.778	8.826	68.192	1.00	26.42
11958	CB	PHE	B	732	-45.669	8.494	69.667	1.00	26.65
11959	CG	PHE	B	732	-46.009	9.643	70.557	1.00	26.39
11960	CD1	PHE	B	732	-47.320	9.903	70.889	1.00	24.34
11961	CE1	PHE	B	732	-47.638	10.966	71.694	1.00	26.55
11962	CZ	PHE	B	732	-46.651	11.795	72.190	1.00	25.55
11963	CE2	PHE	B	732	-45.338	11.553	71.869	1.00	26.82
11964	CD2	PHE	B	732	-45.020	10.481	71.037	1.00	26.49
11965	C	PHE	B	732	-44.879	10.002	67.868	1.00	26.82
11966	O	PHE	B	732	-45.351	11.105	67.691	1.00	26.14
11967	N	ILE	B	733	-43.579	9.767	67.777	1.00	27.54
11968	CA	ILE	B	733	-42.705	10.880	67.455	1.00	28.71
11969	CB	ILE	B	733	-41.221	10.540	67.691	1.00	28.65
11970	CG1	ILE	B	733	-40.882	10.734	69.165	1.00	29.46
11971	CD1	ILE	B	733	-40.854	12.189	69.598	1.00	31.65
11972	CG2	ILE	B	733	-40.335	11.474	66.899	1.00	28.29
11973	C	ILE	B	733	-42.954	11.426	66.042	1.00	29.24
11974	O	ILE	B	733	-42.991	12.636	65.855	1.00	29.00
11975	N	LYS	B	734	-43.150	10.560	65.053	1.00	30.15

FIGURE 3 IA

A	B	C	D	E	F	G	H	I	J
11976	CA	LYS	B	734	-43.375	11.048	63.689	1.00	31.39
11977	CB	LYS	B	734	-43.367	9.915	62.657	1.00	31.04
11978	CG	LYS	B	734	-42.257	8.908	62.869	1.00	32.61
11979	CD	LYS	B	734	-41.564	8.476	61.598	1.00	33.79
11980	CE	LYS	B	734	-42.532	8.011	60.537	1.00	37.05
11981	NZ	LYS	B	734	-41.851	7.565	59.261	1.00	36.85
11982	C	LYS	B	734	-44.657	11.880	63.568	1.00	32.09
11983	O	LYS	B	734	-44.669	12.949	62.951	1.00	31.80
11984	N	GLN	B	735	-45.731	11.405	64.182	1.00	32.99
11985	CA	GLN	B	735	-47.008	12.096	64.082	1.00	34.22
11986	CB	GLN	B	735	-48.157	11.198	64.554	1.00	34.31
11987	CG	GLN	B	735	-48.815	11.597	65.853	1.00	37.67
11988	CD	GLN	B	735	-49.816	12.716	65.650	1.00	42.32
11989	OE1	GLN	B	735	-50.280	12.941	64.531	1.00	45.22
11990	NE2	GLN	B	735	-50.142	13.428	66.720	1.00	43.62
11991	C	GLN	B	735	-46.972	13.435	64.809	1.00	34.36
11992	O	GLN	B	735	-47.587	14.399	64.353	1.00	34.67
11993	N	CYS	B	736	-46.249	13.518	65.923	1.00	34.24
11994	CA	CYS	B	736	-46.107	14.813	66.584	1.00	35.23
11995	CB	CYS	B	736	-45.595	14.666	68.020	1.00	35.10
11996	SG	CYS	B	736	-44.743	16.115	68.740	1.00	38.88
11997	C	CYS	B	736	-45.234	15.789	65.772	1.00	34.41
11998	O	CYS	B	736	-45.438	16.984	65.840	1.00	34.31
11999	N	PHE	B	737	-44.294	15.273	64.983	1.00	34.75
12000	CA	PHE	B	737	-43.450	16.131	64.139	1.00	34.40
12001	CB	PHE	B	737	-42.009	15.601	64.095	1.00	33.38
12002	CG	PHE	B	737	-41.208	15.857	65.349	1.00	30.63
12003	CD1	PHE	B	737	-41.683	16.682	66.341	1.00	28.24
12004	CE1	PHE	B	737	-40.943	16.919	67.481	1.00	25.79
12005	CZ	PHE	B	737	-39.713	16.328	67.645	1.00	25.71
12006	CE2	PHE	B	737	-39.217	15.496	66.664	1.00	26.36
12007	CD2	PHE	B	737	-39.968	15.263	65.520	1.00	28.45
12008	C	PHE	B	737	-43.978	16.240	62.696	1.00	35.34
12009	O	PHE	B	737	-43.315	16.777	61.816	1.00	35.69
12010	N	SER	B	738	-45.170	15.721	62.442	1.00	36.90
12011	CA	SER	B	738	-45.736	15.701	61.090	1.00	38.41
12012	CB	SER	B	738	-46.161	17.102	60.619	1.00	38.34
12013	OG	SER	B	738	-46.998	17.693	61.588	1.00	37.87
12014	C	SER	B	738	-44.820	15.049	60.060	1.00	39.26
12015	O	SER	B	738	-44.673	15.545	58.945	1.00	39.61
12016	N	LEU	B	739	-44.204	13.941	60.442	1.00	40.66
12017	CA	LEU	B	739	-43.374	13.172	59.531	1.00	41.94
12018	CB	LEU	B	739	-42.096	12.730	60.227	1.00	41.77
12019	CG	LEU	B	739	-41.228	13.891	60.718	1.00	41.94
12020	CD1	LEU	B	739	-39.947	13.388	61.369	1.00	40.29
12021	CD2	LEU	B	739	-40.923	14.844	59.564	1.00	41.86
12022	C	LEU	B	739	-44.197	11.967	59.085	1.00	43.28
12023	O	LEU	B	739	-44.712	11.203	59.920	1.00	44.06
12024	N	PRO	B	740	-44.325	11.801	57.772	1.00	43.94
12025	CA	PRO	B	740	-45.178	10.760	57.190	1.00	44.31
12026	CB	PRO	B	740	-45.276	11.180	55.711	1.00	44.53



FIGURE 3 IB

A	B	C	D	E	F	G	H	I	J
12027	CG	PRO	B	740	-44.718	12.605	55.676	1.00	44.79
12028	CD	PRO	B	740	-43.652	12.609	56.739	1.00	44.27
12029	C	PRO	B	740	-44.593	9.358	57.300	1.00	44.50
12030	O	PRO	B	740	-43.439	9.146	56.939	1.00	44.74
12031	O7	NAG	B	971	-1.496	-23.139	73.513	1.00	72.40
12032	C7	NAG	B	971	-1.548	-21.927	73.306	1.00	72.39
12033	C8	NAG	B	971	-2.801	-21.131	73.509	1.00	72.68
12034	N2	NAG	B	971	-0.504	-21.175	72.970	1.00	71.31
12035	C2	NAG	B	971	0.827	-21.683	72.727	1.00	71.53
12036	C1	NAG	B	971	1.680	-20.515	72.241	1.00	69.94
12037	C3	NAG	B	971	1.423	-22.304	73.992	1.00	72.07
12038	O3	NAG	B	971	0.785	-23.540	74.358	1.00	72.11
12039	C4	NAG	B	971	2.888	-22.628	73.783	1.00	72.70
12040	O4	NAG	B	971	3.429	-23.019	75.052	1.00	74.28
12041	C5	NAG	B	971	3.672	-21.451	73.212	1.00	72.39
12042	O5	NAG	B	971	3.036	-20.925	72.042	1.00	71.59
12043	C6	NAG	B	971	5.082	-21.916	72.857	1.00	73.22
12044	O6	NAG	B	971	5.405	-21.573	71.499	1.00	73.48
12045	O7	NAG	B1621		-28.592	-31.215	89.895	1.00	69.71
12046	C7	NAG	B1621		-28.880	-31.667	90.994	1.00	68.34
12047	C8	NAG	B1621		-27.985	-31.492	92.185	1.00	69.03
12048	N2	NAG	B1621		-30.029	-32.286	91.257	1.00	66.17
12049	C2	NAG	B1621		-31.055	-32.550	90.263	1.00	65.21
12050	C1	NAG	B1621		-31.508	-31.261	89.569	1.00	62.67
12051	C3	NAG	B1621		-30.675	-33.599	89.210	1.00	65.79
12052	O3	NAG	B1621		-30.191	-34.840	89.756	1.00	65.25
12053	C4	NAG	B1621		-31.936	-33.851	88.395	1.00	66.12
12054	O4	NAG	B1621		-31.714	-34.873	87.412	1.00	67.57
12055	C5	NAG	B1621		-32.398	-32.545	87.742	1.00	65.66
12056	O5	NAG	B1621		-32.641	-31.542	88.736	1.00	65.08
12057	C6	NAG	B1621		-33.668	-32.766	86.925	1.00	65.94
12058	O6	NAG	B1621		-34.816	-32.262	87.628	1.00	65.92
12059	O7	NAG	B2311		-0.221	-18.701	100.763	1.00	65.86
12060	C7	NAG	B2311		-1.001	-19.645	100.882	1.00	65.25
12061	C8	NAG	B2311		-1.035	-20.782	99.900	1.00	64.98
12062	N2	NAG	B2311		-1.828	-19.772	101.926	1.00	63.88
12063	C2	NAG	B2311		-1.895	-18.773	102.980	1.00	62.57
12064	C1	NAG	B2311		-3.171	-17.935	102.898	1.00	59.08
12065	C3	NAG	B2311		-1.797	-19.460	104.340	1.00	62.63
12066	O3	NAG	B2311		-0.532	-20.133	104.439	1.00	63.27
12067	C4	NAG	B2311		-1.973	-18.451	105.477	1.00	62.24
12068	O4	NAG	B2311		-2.095	-19.163	106.722	1.00	62.14
12069	C5	NAG	B2311		-3.204	-17.560	105.246	1.00	61.89
12070	O5	NAG	B2311		-3.193	-16.957	103.943	1.00	60.57
12071	C6	NAG	B2311		-3.305	-16.457	106.294	1.00	62.05
12072	O6	NAG	B2311		-2.385	-15.410	105.960	1.00	62.89
12073	O7	NAG	B2411		-31.170	-12.163	112.789	1.00	53.05
12074	C7	NAG	B2411		-31.967	-13.042	112.519	1.00	53.48
12075	C8	NAG	B2411		-31.539	-14.432	112.162	1.00	53.33
12076	N2	NAG	B2411		-33.271	-12.817	112.600	1.00	53.74
12077	C2	NAG	B2411		-33.726	-11.504	112.997	1.00	55.17

FIGURE 3 IC

A	B	C	D	E	F	G	H	I	J
12078	C1	NAG	B2411		-34.243	-10.613	111.876	1.00	52.90
12079	C3	NAG	B2411		-34.820	-11.730	114.021	1.00	57.59
12080	O3	NAG	B2411		-34.303	-12.454	115.133	1.00	59.38
12081	C4	NAG	B2411		-35.323	-10.405	114.540	1.00	59.18
12082	O4	NAG	B2411		-36.434	-10.680	115.399	1.00	65.63
12083	C5	NAG	B2411		-35.736	-9.513	113.375	1.00	57.72
12084	O5	NAG	B2411		-34.649	-9.370	112.457	1.00	54.84
12085	C6	NAG	B2411		-36.157	-8.144	113.878	1.00	57.33
12086	O6	NAG	B2411		-36.390	-7.301	112.749	1.00	58.35
12087	O7	NAG	B2412		-39.628	-7.940	114.970	1.00	82.70
12088	C7	NAG	B2412		-39.201	-8.987	115.428	1.00	82.55
12089	C8	NAG	B2412		-39.649	-10.325	114.904	1.00	82.82
12090	N2	NAG	B2412		-38.250	-9.010	116.361	1.00	81.55
12091	C2	NAG	B2412		-37.736	-10.262	116.879	1.00	80.85
12092	C1	NAG	B2412		-36.220	-10.326	116.723	1.00	77.61
12093	C3	NAG	B2412		-38.144	-10.408	118.339	1.00	81.59
12094	O3	NAG	B2412		-39.575	-10.458	118.443	1.00	82.35
12095	C4	NAG	B2412		-37.514	-11.666	118.926	1.00	81.41
12096	O4	NAG	B2412		-37.862	-11.805	120.313	1.00	81.61
12097	C5	NAG	B2412		-36.003	-11.573	118.748	1.00	80.50
12098	O5	NAG	B2412		-35.713	-11.506	117.351	1.00	80.11
12099	C6	NAG	B2412		-35.302	-12.783	119.349	1.00	80.52
12100	O6	NAG	B2412		-35.982	-13.973	118.934	1.00	79.91
12101	O7	NAG	B2931		-24.335	-30.051	115.266	1.00	75.19
12102	C7	NAG	B2931		-24.419	-30.370	114.085	1.00	74.43
12103	C8	NAG	B2931		-23.672	-31.529	113.485	1.00	75.00
12104	N2	NAG	B2931		-25.246	-29.735	113.262	1.00	72.23
12105	C2	NAG	B2931		-26.042	-28.629	113.752	1.00	70.22
12106	C1	NAG	B2931		-25.770	-27.339	112.982	1.00	66.92
12107	C3	NAG	B2931		-27.493	-29.073	113.627	1.00	69.93
12108	O3	NAG	B2931		-27.724	-30.212	114.460	1.00	70.63
12109	C4	NAG	B2931		-28.425	-27.952	114.027	1.00	69.60
12110	O4	NAG	B2931		-29.789	-28.385	113.890	1.00	70.12
12111	C5	NAG	B2931		-28.126	-26.758	113.134	1.00	68.85
12112	O5	NAG	B2931		-26.762	-26.347	113.283	1.00	68.61
12113	C6	NAG	B2931		-29.024	-25.590	113.510	1.00	68.50
12114	O6	NAG	B2931		-28.254	-24.638	114.253	1.00	67.60
12115	O7	NAG	B3331		-23.192	17.701	106.780	1.00	62.25
12116	C7	NAG	B3331		-23.032	16.659	107.397	1.00	61.75
12117	C8	NAG	B3331		-21.667	16.169	107.783	1.00	62.11
12118	N2	NAG	B3331		-24.062	15.939	107.838	1.00	60.45
12119	C2	NAG	B3331		-25.414	16.360	107.514	1.00	59.68
12120	C1	NAG	B3331		-26.201	15.190	106.947	1.00	55.92
12121	C3	NAG	B3331		-26.163	16.929	108.717	1.00	60.28
12122	O3	NAG	B3331		-25.494	18.113	109.169	1.00	60.01
12123	C4	NAG	B3331		-27.609	17.272	108.333	1.00	60.83
12124	O4	NAG	B3331		-28.395	17.557	109.504	1.00	61.83
12125	C5	NAG	B3331		-28.283	16.161	107.520	1.00	60.34
12126	O5	NAG	B3331		-27.431	15.710	106.467	1.00	58.70
12127	C6	NAG	B3331		-29.573	16.667	106.876	1.00	61.21
12128	O6	NAG	B3331		-30.483	15.574	106.667	1.00	63.30

FIGURE 3 ID

A	B	C	D	E	F	G	H	I	J
12129	N	ARG	C	14	-56.594	-17.508	55.235	1.00	59.31
12130	CA	ARG	C	14	-57.330	-18.684	54.673	1.00	59.15
12131	CB	ARG	C	14	-57.826	-19.576	55.819	1.00	59.77
12132	CG	ARG	C	14	-58.370	-20.947	55.414	1.00	61.80
12133	CD	ARG	C	14	-57.914	-22.079	56.340	1.00	65.74
12134	NE	ARG	C	14	-58.993	-23.002	56.706	1.00	68.29
12135	CZ	ARG	C	14	-59.063	-23.632	57.878	1.00	70.05
12136	NH1	ARG	C	14	-58.114	-23.443	58.789	1.00	71.17
12137	NH2	ARG	C	14	-60.071	-24.455	58.145	1.00	70.83
12138	C	ARG	C	14	-58.489	-18.232	53.774	1.00	58.04
12139	O	ARG	C	14	-59.531	-18.887	53.706	1.00	58.12
12140	N	LYS	C	15	-58.301	-17.117	53.069	1.00	56.51
12141	CA	LYS	C	15	-59.362	-16.601	52.209	1.00	54.97
12142	CB	LYS	C	15	-59.460	-15.067	52.267	1.00	55.35
12143	CG	LYS	C	15	-58.142	-14.308	52.404	1.00	56.79
12144	CD	LYS	C	15	-58.366	-12.811	52.183	1.00	59.18
12145	CE	LYS	C	15	-57.194	-11.957	52.677	1.00	60.92
12146	NZ	LYS	C	15	-57.343	-11.519	54.106	1.00	61.81
12147	C	LYS	C	15	-59.268	-17.071	50.766	1.00	53.63
12148	O	LYS	C	15	-58.213	-17.484	50.292	1.00	53.86
12149	N	THR	C	16	-60.391	-17.003	50.067	1.00	51.93
12150	CA	THR	C	16	-60.428	-17.371	48.663	1.00	50.01
12151	CB	THR	C	16	-61.491	-18.445	48.422	1.00	50.09
12152	OG1	THR	C	16	-62.747	-17.988	48.938	1.00	50.53
12153	CG2	THR	C	16	-61.190	-19.676	49.260	1.00	49.69
12154	C	THR	C	16	-60.767	-16.130	47.877	1.00	48.35
12155	O	THR	C	16	-61.000	-15.073	48.455	1.00	48.10
12156	N	TYR	C	17	-60.770	-16.256	46.559	1.00	46.31
12157	CA	TYR	C	17	-61.136	-15.154	45.694	1.00	44.36
12158	CB	TYR	C	17	-60.450	-15.330	44.340	1.00	44.44
12159	CG	TYR	C	17	-60.674	-14.211	43.357	1.00	43.09
12160	CD1	TYR	C	17	-59.936	-13.045	43.432	1.00	43.17
12161	CE1	TYR	C	17	-60.135	-12.013	42.537	1.00	42.32
12162	CZ	TYR	C	17	-61.079	-12.148	41.547	1.00	42.01
12163	OH	TYR	C	17	-61.274	-11.122	40.655	1.00	40.75
12164	CE2	TYR	C	17	-61.820	-13.306	41.446	1.00	42.15
12165	CD2	TYR	C	17	-61.614	-14.327	42.349	1.00	41.90
12166	C	TYR	C	17	-62.658	-15.203	45.568	1.00	43.53
12167	O	TYR	C	17	-63.202	-16.089	44.922	1.00	43.35
12168	N	THR	C	18	-63.347	-14.258	46.196	1.00	42.57
12169	CA	THR	C	18	-64.811	-14.259	46.211	1.00	41.95
12170	CB	THR	C	18	-65.323	-13.527	47.451	1.00	41.87
12171	OG1	THR	C	18	-65.053	-12.127	47.308	1.00	42.07
12172	CG2	THR	C	18	-64.537	-13.949	48.699	1.00	42.05
12173	C	THR	C	18	-65.501	-13.628	45.010	1.00	41.61
12174	O	THR	C	18	-64.872	-13.041	44.132	1.00	41.43
12175	N	LEU	C	19	-66.824	-13.748	45.011	1.00	41.36
12176	CA	LEU	C	19	-67.656	-13.138	43.993	1.00	41.21
12177	CB	LEU	C	19	-69.106	-13.630	44.091	1.00	40.58
12178	CG	LEU	C	19	-70.049	-12.956	43.083	1.00	40.27
12179	CG1	LEU	C	19	-69.561	-13.169	41.653	1.00	37.72

FIGURE 3 IE

A	B	C	D	E	F	G	H	I	J
12180	CD2	LEU	C	19	-71.488	-13.411	43.242	1.00	38.11
12181	C	LEU	C	19	-67.599	-11.634	44.210	1.00	41.21
12182	O	LEU	C	19	-67.565	-10.861	43.260	1.00	41.21
12183	N	THR	C	20	-67.591	-11.233	45.474	1.00	41.41
12184	CA	THR	C	20	-67.487	-9.830	45.815	1.00	41.76
12185	CB	THR	C	20	-67.676	-9.631	47.295	1.00	41.53
12186	OG1	THR	C	20	-69.038	-9.903	47.632	1.00	42.25
12187	CG2	THR	C	20	-67.539	-8.183	47.627	1.00	41.82
12188	C	THR	C	20	-66.134	-9.283	45.388	1.00	42.26
12189	O	THR	C	20	-66.060	-8.192	44.817	1.00	42.44
12190	N	ASP	C	21	-65.066	-10.037	45.653	1.00	42.41
12191	CA	ASP	C	21	-63.732	-9.609	45.235	1.00	42.96
12192	CB	ASP	C	21	-62.702	-10.721	45.435	1.00	43.01
12193	CG	ASP	C	21	-62.481	-11.056	46.890	1.00	43.39
12194	OD1	ASP	C	21	-62.627	-10.156	47.740	1.00	44.65
12195	OD2	ASP	C	21	-62.170	-12.201	47.277	1.00	43.27
12196	C	ASP	C	21	-63.754	-9.208	43.769	1.00	43.05
12197	O	ASP	C	21	-63.363	-8.101	43.419	1.00	43.10
12198	N	TYR	C	22	-64.217	-10.124	42.922	1.00	43.50
12199	CA	TYR	C	22	-64.325	-9.900	41.481	1.00	43.70
12200	CB	TYR	C	22	-64.818	-11.179	40.792	1.00	43.69
12201	CG	TYR	C	22	-65.288	-10.957	39.370	1.00	43.01
12202	CD1	TYR	C	22	-64.396	-10.569	38.376	1.00	43.15
12203	CE1	TYR	C	22	-64.826	-10.350	37.070	1.00	43.76
12204	CZ	TYR	C	22	-66.169	-10.523	36.756	1.00	43.72
12205	OH	TYR	C	22	-66.602	-10.311	35.465	1.00	43.80
12206	CE2	TYR	C	22	-67.071	-10.910	37.732	1.00	42.34
12207	CD2	TYR	C	22	-66.627	-11.122	39.027	1.00	42.14
12208	C	TYR	C	22	-65.259	-8.749	41.112	1.00	44.08
12209	O	TYR	C	22	-65.041	-8.045	40.122	1.00	44.19
12210	N	LEU	C	23	-66.305	-8.557	41.896	1.00	44.48
12211	CA	LEU	C	23	-67.267	-7.525	41.562	1.00	45.38
12212	CB	LEU	C	23	-68.628	-7.829	42.189	1.00	44.86
12213	CG	LEU	C	23	-69.390	-9.010	41.584	1.00	44.42
12214	CD1	LEU	C	23	-70.828	-9.061	42.101	1.00	42.61
12215	CD2	LEU	C	23	-69.361	-8.937	40.062	1.00	42.28
12216	C	LEU	C	23	-66.780	-6.148	41.974	1.00	46.45
12217	O	LEU	C	23	-67.070	-5.157	41.313	1.00	46.55
12218	N	LYS	C	24	-66.035	-6.097	43.069	1.00	47.86
12219	CA	LYS	C	24	-65.533	-4.843	43.608	1.00	49.31
12220	CB	LYS	C	24	-65.686	-4.828	45.131	1.00	49.40
12221	CG	LYS	C	24	-67.133	-4.939	45.604	1.00	50.38
12222	CD	LYS	C	24	-68.020	-3.875	44.940	1.00	50.86
12223	CE	LYS	C	24	-69.486	-4.085	45.310	1.00	51.18
12224	NZ	LYS	C	24	-70.403	-3.015	44.800	1.00	50.26
12225	C	LYS	C	24	-64.076	-4.617	43.235	1.00	50.34
12226	O	LYS	C	24	-63.490	-3.592	43.585	1.00	50.81
12227	N	ASN	C	25	-63.480	-5.575	42.539	1.00	51.21
12228	CA	ASN	C	25	-62.108	-5.414	42.105	1.00	52.48
12229	CB	ASN	C	25	-61.998	-4.186	41.201	1.00	52.83
12230	CG	ASN	C	25	-62.701	-4.385	39.871	1.00	54.31

FIGURE 3 IF

A	B	C	D	E	F	G	H	I	J
12231	OD1	ASN	C	25	-62.588	-5.444	39.257	1.00	56.23
12232	ND2	ASN	C	25	-63.436	-3.374	39.425	1.00	55.37
12233	C	ASN	C	25	-61.105	-5.318	43.256	1.00	53.03
12234	O	ASN	C	25	-60.083	-4.651	43.141	1.00	52.96
12235	N	THR	C	26	-61.402	-5.988	44.363	1.00	53.73
12236	CA	THR	C	26	-60.494	-6.011	45.494	1.00	54.61
12237	CB	THR	C	26	-60.865	-7.157	46.438	1.00	54.70
12238	OG1	THR	C	26	-62.056	-6.812	47.158	1.00	55.46
12239	CG2	THR	C	26	-59.817	-7.314	47.540	1.00	54.55
12240	C	THR	C	26	-59.048	-6.165	45.017	1.00	55.09
12241	O	THR	C	26	-58.162	-5.427	45.447	1.00	55.02
12242	N	TYR	C	27	-58.821	-7.111	44.111	1.00	55.59
12243	CA	TYR	C	27	-57.484	-7.356	43.584	1.00	56.25
12244	CB	TYR	C	27	-57.151	-8.849	43.652	1.00	55.96
12245	CG	TYR	C	27	-57.406	-9.426	45.028	1.00	54.73
12246	CD1	TYR	C	27	-56.587	-9.101	46.105	1.00	54.43
12247	CE1	TYR	C	27	-56.827	-9.618	47.369	1.00	52.54
12248	CZ	TYR	C	27	-57.900	-10.451	47.561	1.00	52.34
12249	OH	TYR	C	27	-58.160	-10.972	48.805	1.00	53.22
12250	CE2	TYR	C	27	-58.731	-10.774	46.513	1.00	52.33
12251	CD2	TYR	C	27	-58.481	-10.261	45.260	1.00	53.00
12252	C	TYR	C	27	-57.304	-6.783	42.180	1.00	56.99
12253	O	TYR	C	27	-57.593	-7.432	41.185	1.00	56.86
12254	N	ARG	C	28	-56.798	-5.555	42.134	1.00	58.45
12255	CA	ARG	C	28	-56.603	-4.798	40.899	1.00	59.78
12256	CB	ARG	C	28	-56.602	-3.298	41.215	1.00	60.24
12257	CG	ARG	C	28	-57.785	-2.515	40.686	1.00	62.82
12258	CD	ARG	C	28	-57.932	-1.118	41.292	1.00	66.38
12259	NE	ARG	C	28	-58.666	-1.151	42.558	1.00	69.47
12260	CZ	ARG	C	28	-59.184	-0.082	43.160	1.00	70.68
12261	NH1	ARG	C	28	-59.050	1.125	42.615	1.00	70.81
12262	NH2	ARG	C	28	-59.839	-0.220	44.310	1.00	70.59
12263	C	ARG	C	28	-55.302	-5.109	40.191	1.00	60.06
12264	O	ARG	C	28	-54.233	-5.064	40.791	1.00	59.89
12265	N	LEU	C	29	-55.395	-5.399	38.900	1.00	60.70
12266	CA	LEU	C	29	-54.210	-5.618	38.097	1.00	61.41
12267	CB	LEU	C	29	-54.540	-6.421	36.844	1.00	61.17
12268	CG	LEU	C	29	-54.629	-7.932	37.038	1.00	61.39
12269	CD1	LEU	C	29	-55.261	-8.591	35.823	1.00	61.58
12270	CD2	LEU	C	29	-53.252	-8.499	37.298	1.00	61.27
12271	C	LEU	C	29	-53.699	-4.250	37.699	1.00	62.14
12272	O	LEU	C	29	-54.407	-3.481	37.048	1.00	62.24
12273	N	LYS	C	30	-52.484	-3.927	38.121	1.00	62.82
12274	CA	LYS	C	30	-51.889	-2.660	37.741	1.00	63.41
12275	CB	LYS	C	30	-50.628	-2.383	38.567	1.00	63.28
12276	CG	LYS	C	30	-50.533	-0.964	39.122	1.00	64.04
12277	CD	LYS	C	30	-50.132	-0.957	40.598	1.00	64.72
12278	CE	LYS	C	30	-50.252	0.440	41.214	1.00	65.38
12279	NZ	LYS	C	30	-51.623	1.024	41.080	1.00	65.09
12280	C	LYS	C	30	-51.552	-2.737	36.260	1.00	63.67
12281	O	LYS	C	30	-51.233	-3.805	35.745	1.00	63.57

FIGURE 3 IG

A	B	C	D	E	F	G	H	I	J
12282	N	LEU	C	31	-51.653	-1.608	35.575	1.00	64.38
12283	CA	LEU	C	31	-51.292	-1.534	34.167	1.00	65.35
12284	CB	LEU	C	31	-52.499	-1.151	33.299	1.00	65.22
12285	CG	LEU	C	31	-53.869	-1.831	33.385	1.00	65.26
12286	CD1	LEU	C	31	-54.681	-1.328	34.576	1.00	64.95
12287	CD2	LEU	C	31	-54.628	-1.569	32.102	1.00	65.03
12288	C	LEU	C	31	-50.235	-0.441	34.024	1.00	66.02
12289	O	LEU	C	31	-50.043	0.369	34.935	1.00	66.11
12290	N	TYR	C	32	-49.543	-0.422	32.893	1.00	66.68
12291	CA	TYR	C	32	-48.619	0.667	32.621	1.00	67.59
12292	CB	TYR	C	32	-47.159	0.282	32.874	1.00	67.51
12293	CG	TYR	C	32	-46.281	1.495	33.113	1.00	67.22
12294	CD1	TYR	C	32	-45.767	2.223	32.053	1.00	67.11
12295	CE1	TYR	C	32	-44.976	3.336	32.269	1.00	68.00
12296	CZ	TYR	C	32	-44.703	3.737	33.559	1.00	67.92
12297	OH	TYR	C	32	-43.919	4.845	33.780	1.00	68.81
12298	CE2	TYR	C	32	-45.207	3.032	34.629	1.00	67.41
12299	CD2	TYR	C	32	-45.994	1.924	34.402	1.00	66.89
12300	C	TYR	C	32	-48.819	1.121	31.192	1.00	68.31
12301	O	TYR	C	32	-48.103	0.705	30.285	1.00	68.18
12302	N	SER	C	33	-49.818	1.972	31.000	1.00	69.60
12303	CA	SER	C	33	-50.153	2.457	29.672	1.00	70.73
12304	CB	SER	C	33	-51.666	2.619	29.515	1.00	70.72
12305	OG	SER	C	33	-52.008	2.979	28.181	1.00	71.44
12306	C	SER	C	33	-49.459	3.773	29.395	1.00	71.43
12307	O	SER	C	33	-49.712	4.778	30.059	1.00	71.71
12308	N	LEU	C	34	-48.567	3.754	28.416	1.00	72.35
12309	CA	LEU	C	34	-47.866	4.956	28.015	1.00	73.17
12310	CB	LEU	C	34	-46.359	4.733	28.064	1.00	72.95
12311	CG	LEU	C	34	-45.856	3.406	27.505	1.00	72.50
12312	CD1	LEU	C	34	-45.844	3.422	25.989	1.00	71.40
12313	CD2	LEU	C	34	-44.472	3.128	28.047	1.00	72.03
12314	C	LEU	C	34	-48.300	5.318	26.609	1.00	73.94
12315	O	LEU	C	34	-48.922	4.514	25.917	1.00	73.98
12316	N	ARG	C	35	-47.988	6.538	26.201	1.00	74.87
12317	CA	ARG	C	35	-48.303	6.988	24.857	1.00	75.88
12318	CB	ARG	C	35	-49.614	7.789	24.823	1.00	75.99
12319	CG	ARG	C	35	-49.811	8.762	25.979	1.00	76.62
12320	CD	ARG	C	35	-51.037	9.673	25.839	1.00	77.67
12321	NE	ARG	C	35	-52.302	8.939	25.882	1.00	78.08
12322	CZ	ARG	C	35	-53.497	9.504	25.748	1.00	78.24
12323	NH1	ARG	C	35	-53.598	10.815	25.566	1.00	77.92
12324	NH2	ARG	C	35	-54.596	8.761	25.799	1.00	77.84
12325	C	ARG	C	35	-47.124	7.798	24.336	1.00	76.42
12326	O	ARG	C	35	-46.803	8.861	24.866	1.00	76.47
12327	N	TRP	C	36	-46.470	7.269	23.307	1.00	77.18
12328	CA	TRP	C	36	-45.283	7.894	22.741	1.00	77.77
12329	CB	TRP	C	36	-44.548	6.913	21.828	1.00	77.64
12330	CG	TRP	C	36	-44.025	5.709	22.539	1.00	78.06
12331	CD1	TRP	C	36	-44.588	4.466	22.571	1.00	78.41
12332	NE1	TRP	C	36	-43.813	3.612	23.318	1.00	78.31

FIGURE 3 IH

A	B	C	D	E	F	G	H	I	J
12333	CE2	TRP	C	36	-42.728	4.299	23.794	1.00	78.48
12334	CD2	TRP	C	36	-42.829	5.624	23.319	1.00	78.27
12335	CE3	TRP	C	36	-41.828	6.535	23.668	1.00	78.05
12336	CZ3	TRP	C	36	-40.785	6.106	24.465	1.00	78.20
12337	CH2	TRP	C	36	-40.714	4.784	24.919	1.00	78.05
12338	CZ2	TRP	C	36	-41.673	3.869	24.597	1.00	78.18
12339	C	TRP	C	36	-45.586	9.174	21.974	1.00	78.25
12340	O	TRP	C	36	-46.190	9.149	20.900	1.00	78.31
12341	N	ILE	C	37	-45.155	10.297	22.532	1.00	78.82
12342	CA	ILE	C	37	-45.307	11.573	21.858	1.00	79.44
12343	CB	ILE	C	37	-45.381	12.717	22.889	1.00	79.40
12344	CG1	ILE	C	37	-45.439	14.085	22.195	1.00	79.66
12345	CD1	ILE	C	37	-44.087	14.770	22.021	1.00	79.61
12346	CG2	ILE	C	37	-44.220	12.621	23.864	1.00	79.60
12347	C	ILE	C	37	-44.135	11.751	20.897	1.00	79.77
12348	O	ILE	C	37	-44.213	12.511	19.937	1.00	79.90
12349	N	SER	C	38	-43.061	11.008	21.145	1.00	80.29
12350	CA	SER	C	38	-41.858	11.087	20.327	1.00	80.82
12351	CB	SER	C	38	-40.873	12.072	20.956	1.00	80.90
12352	OG	SER	C	38	-40.539	11.670	22.276	1.00	80.77
12353	C	SER	C	38	-41.186	9.727	20.207	1.00	81.18
12354	O	SER	C	38	-41.839	8.686	20.283	1.00	81.24
12355	N	ASP	C	39	-39.871	9.744	20.018	1.00	81.60
12356	CA	ASP	C	39	-39.097	8.517	19.958	1.00	82.00
12357	CB	ASP	C	39	-38.289	8.452	18.669	1.00	82.03
12358	CG	ASP	C	39	-37.866	7.041	18.323	1.00	82.10
12359	OD1	ASP	C	39	-38.078	6.629	17.171	1.00	82.27
12360	OD2	ASP	C	39	-37.322	6.265	19.132	1.00	81.97
12361	C	ASP	C	39	-38.163	8.433	21.161	1.00	82.36
12362	O	ASP	C	39	-37.227	7.639	21.179	1.00	82.27
12363	N	HIS	C	40	-38.419	9.259	22.167	1.00	82.93
12364	CA	HIS	C	40	-37.577	9.283	23.356	1.00	83.59
12365	CB	HIS	C	40	-36.573	10.440	23.285	1.00	83.80
12366	CG	HIS	C	40	-36.336	10.960	21.900	1.00	84.44
12367	ND1	HIS	C	40	-36.976	12.078	21.409	1.00	84.78
12368	CE1	HIS	C	40	-36.574	12.303	20.170	1.00	85.23
12369	NE2	HIS	C	40	-35.695	11.373	19.841	1.00	85.24
12370	CD2	HIS	C	40	-35.526	10.522	20.906	1.00	84.75
12371	C	HIS	C	40	-38.439	9.467	24.593	1.00	83.84
12372	O	HIS	C	40	-38.143	8.944	25.667	1.00	83.91
12373	N	GLU	C	41	-39.507	10.234	24.437	1.00	84.11
12374	CA	GLU	C	41	-40.387	10.515	25.551	1.00	84.28
12375	CB	GLU	C	41	-40.523	12.026	25.743	1.00	84.27
12376	CG	GLU	C	41	-39.215	12.726	26.072	1.00	84.40
12377	CD	GLU	C	41	-39.278	14.225	25.843	1.00	84.96
12378	OE1	GLU	C	41	-39.163	14.651	24.672	1.00	85.40
12379	OE2	GLU	C	41	-39.440	14.977	26.830	1.00	84.60
12380	C	GLU	C	41	-41.754	9.892	25.337	1.00	84.47
12381	O	GLU	C	41	-42.182	9.674	24.203	1.00	84.46
12382	N	TYR	C	42	-42.421	9.586	26.441	1.00	84.64
12383	CA	TYR	C	42	-43.774	9.068	26.408	1.00	84.87

FIGURE 3 II

A	B	C	D	E	F	G	H	I	J
12384	CB	TYR	C	42	-43.796	7.532	26.438	1.00	84.80
12385	CG	TYR	C	42	-43.306	6.902	27.726	1.00	84.02
12386	CD1	TYR	C	42	-43.977	7.109	28.924	1.00	83.42
12387	CE1	TYR	C	42	-43.541	6.537	30.097	1.00	82.96
12388	CZ	TYR	C	42	-42.422	5.739	30.089	1.00	82.88
12389	OH	TYR	C	42	-41.993	5.170	31.265	1.00	82.70
12390	CE2	TYR	C	42	-41.736	5.510	28.913	1.00	83.03
12391	CD2	TYR	C	42	-42.182	6.089	27.740	1.00	83.23
12392	C	TYR	C	42	-44.494	9.660	27.605	1.00	85.34
12393	O	TYR	C	42	-43.858	10.056	28.579	1.00	85.32
12394	N	LEU	C	43	-45.816	9.741	27.532	1.00	85.95
12395	CA	LEU	C	43	-46.584	10.321	28.624	1.00	86.61
12396	CB	LEU	C	43	-47.702	11.209	28.080	1.00	86.53
12397	CG	LEU	C	43	-47.305	12.660	27.813	1.00	86.47
12398	CD1	LEU	C	43	-45.798	12.823	27.843	1.00	86.41
12399	CD2	LEU	C	43	-47.885	13.154	26.497	1.00	86.63
12400	C	LEU	C	43	-47.151	9.264	29.552	1.00	87.14
12401	O	LEU	C	43	-47.387	8.129	29.149	1.00	87.11
12402	N	TYR	C	44	-47.358	9.650	30.803	1.00	88.04
12403	CA	TYR	C	44	-47.915	8.759	31.808	1.00	88.99
12404	CB	TYR	C	44	-46.805	8.153	32.656	1.00	88.86
12405	CG	TYR	C	44	-47.257	7.016	33.533	1.00	88.89
12406	CD1	TYR	C	44	-47.742	5.840	32.979	1.00	88.78
12407	CE1	TYR	C	44	-48.155	4.793	33.778	1.00	88.68
12408	CZ	TYR	C	44	-48.083	4.914	35.148	1.00	88.89
12409	OH	TYR	C	44	-48.492	3.872	35.950	1.00	89.26
12410	CE2	TYR	C	44	-47.605	6.073	35.722	1.00	88.83
12411	CD2	TYR	C	44	-47.197	7.115	34.916	1.00	88.84
12412	C	TYR	C	44	-48.863	9.567	32.677	1.00	89.77
12413	O	TYR	C	44	-48.695	10.776	32.821	1.00	89.89
12414	N	LYS	C	45	-49.860	8.908	33.256	1.00	90.81
12415	CA	LYS	C	45	-50.869	9.620	34.036	1.00	91.87
12416	CB	LYS	C	45	-52.221	9.590	33.310	1.00	91.78
12417	CG	LYS	C	45	-52.164	9.914	31.814	1.00	92.08
12418	CD	LYS	C	45	-51.805	8.692	30.972	1.00	92.16
12419	CE	LYS	C	45	-52.201	8.877	29.519	1.00	92.01
12420	NZ	LYS	C	45	-52.202	7.591	28.766	1.00	92.72
12421	C	LYS	C	45	-51.032	9.060	35.447	1.00	92.57
12422	O	LYS	C	45	-51.927	8.253	35.694	1.00	92.69
12423	N	GLN	C	46	-50.186	9.511	36.372	1.00	93.38
12424	CA	GLN	C	46	-50.218	9.015	37.749	1.00	94.22
12425	CB	GLN	C	46	-48.913	9.366	38.475	1.00	94.24
12426	CG	GLN	C	46	-48.374	8.268	39.395	1.00	94.78
12427	CD	GLN	C	46	-49.139	8.143	40.705	1.00	95.16
12428	OE1	GLN	C	46	-50.366	8.068	40.710	1.00	95.31
12429	NE2	GLN	C	46	-48.411	8.107	41.816	1.00	95.41
12430	C	GLN	C	46	-51.418	9.548	38.536	1.00	94.68
12431	O	GLN	C	46	-51.269	10.449	39.363	1.00	94.77
12432	N	GLU	C	47	-52.593	8.973	38.279	1.00	95.27
12433	CA	GLU	C	47	-53.851	9.343	38.944	1.00	95.80
12434	CB	GLU	C	47	-54.120	8.441	40.156	1.00	95.88



FIGURE 3 IJ

A	B	C	D	E	F	G	H	I	J
12435	CG	GLU	C	47	-55.588	8.386	40.563	1.00	96.18
12436	CD	GLU	C	47	-55.795	8.516	42.063	1.00	96.41
12437	OE1	GLU	C	47	-55.740	9.655	42.577	1.00	96.51
12438	OE2	GLU	C	47	-56.020	7.484	42.730	1.00	96.50
12439	C	GLU	C	47	-53.914	10.806	39.377	1.00	96.06
12440	O	GLU	C	47	-54.466	11.135	40.426	1.00	96.06
12441	N	ASN	C	48	-53.350	11.683	38.561	1.00	96.45
12442	CA	ASN	C	48	-53.325	13.096	38.883	1.00	96.79
12443	CB	ASN	C	48	-52.344	13.362	40.031	1.00	96.76
12444	CG	ASN	C	48	-52.768	14.526	40.920	1.00	96.79
12445	OD1	ASN	C	48	-53.812	15.143	40.707	1.00	96.55
12446	ND2	ASN	C	48	-51.954	14.822	41.929	1.00	96.67
12447	C	ASN	C	48	-52.901	13.870	37.650	1.00	97.05
12448	O	ASN	C	48	-53.737	14.337	36.874	1.00	97.18
12449	N	ASN	C	49	-51.593	13.967	37.454	1.00	97.25
12450	CA	ASN	C	49	-51.052	14.748	36.359	1.00	97.43
12451	CB	ASN	C	49	-50.086	15.790	36.912	1.00	97.48
12452	CG	ASN	C	49	-50.143	15.890	38.424	1.00	97.66
12453	OD1	ASN	C	49	-49.374	15.232	39.130	1.00	97.35
12454	ND2	ASN	C	49	-51.054	16.714	38.931	1.00	97.85
12455	C	ASN	C	49	-50.315	13.901	35.342	1.00	97.54
12456	O	ASN	C	49	-49.948	12.758	35.614	1.00	97.56
12457	N	ILE	C	50	-50.084	14.484	34.173	1.00	97.73
12458	CA	ILE	C	50	-49.359	13.809	33.113	1.00	97.89
12459	CB	ILE	C	50	-49.779	14.357	31.748	1.00	97.92
12460	CG1	ILE	C	50	-51.246	14.025	31.480	1.00	98.05
12461	CD1	ILE	C	50	-51.904	14.956	30.490	1.00	98.30
12462	CG2	ILE	C	50	-48.889	13.791	30.654	1.00	97.72
12463	C	ILE	C	50	-47.861	13.978	33.298	1.00	98.00
12464	O	ILE	C	50	-47.334	15.086	33.239	1.00	97.98
12465	N	LEU	C	51	-47.180	12.866	33.536	1.00	98.19
12466	CA	LEU	C	51	-45.738	12.881	33.684	1.00	98.33
12467	CB	LEU	C	51	-45.289	11.771	34.634	1.00	98.39
12468	CG	LEU	C	51	-45.481	11.940	36.144	1.00	98.49
12469	CD1	LEU	C	51	-46.875	12.447	36.481	1.00	98.70
12470	CD2	LEU	C	51	-45.191	10.627	36.870	1.00	98.48
12471	C	LEU	C	51	-45.096	12.665	32.324	1.00	98.41
12472	O	LEU	C	51	-45.553	11.837	31.536	1.00	98.34
12473	N	VAL	C	52	-44.050	13.429	32.039	1.00	98.58
12474	CA	VAL	C	52	-43.288	13.222	30.821	1.00	98.83
12475	CB	VAL	C	52	-42.650	14.528	30.308	1.00	98.82
12476	CG1	VAL	C	52	-41.491	14.951	31.200	1.00	98.92
12477	CG2	VAL	C	52	-42.191	14.368	28.863	1.00	98.68
12478	C	VAL	C	52	-42.216	12.212	31.204	1.00	98.95
12479	O	VAL	C	52	-41.835	12.139	32.367	1.00	99.00
12480	N	PHE	C	53	-41.748	11.415	30.252	1.00	99.11
12481	CA	PHE	C	53	-40.745	10.404	30.563	1.00	99.34
12482	CB	PHE	C	53	-41.399	9.033	30.736	1.00	99.28
12483	CG	PHE	C	53	-41.855	8.734	32.137	1.00	99.21
12484	CD1	PHE	C	53	-43.035	9.264	32.629	1.00	99.25
12485	CE1	PHE	C	53	-43.460	8.973	33.912	1.00	99.14

FIGURE 3 IK

A	B	C	D	E	F	G	H	I	J
12486	CZ	PHE	C	53	-42.713	8.138	34.714	1.00	99.13
12487	CE2	PHE	C	53	-41.542	7.595	34.232	1.00	99.16
12488	CD2	PHE	C	53	-41.121	7.888	32.949	1.00	99.08
12489	C	PHE	C	53	-39.698	10.292	29.472	1.00	99.62
12490	O	PHE	C	53	-40.028	10.241	28.289	1.00	99.62
12491	N	ASN	C	54	-38.433	10.242	29.875	1.00	99.97
12492	CA	ASN	C	54	-37.352	10.043	28.926	1.00100.28	
12493	CB	ASN	C	54	-36.065	10.704	29.423	1.00100.27	
12494	CG	ASN	C	54	-35.132	11.099	28.288	1.00100.22	
12495	OD1	ASN	C	54	-34.615	12.215	28.259	1.00	99.74
12496	ND2	ASN	C	54	-34.918	10.185	27.343	1.00100.19	
12497	C	ASN	C	54	-37.151	8.544	28.768	1.00100.54	
12498	O	ASN	C	54	-36.831	7.853	29.732	1.00100.56	
12499	N	ALA	C	55	-37.348	8.039	27.557	1.00100.95	
12500	CA	ALA	C	55	-37.216	6.607	27.311	1.00101.44	
12501	CB	ALA	C	55	-37.472	6.294	25.851	1.00101.38	
12502	C	ALA	C	55	-35.863	6.051	27.738	1.00101.82	
12503	O	ALA	C	55	-35.786	4.955	28.291	1.00101.88	
12504	N	GLU	C	56	-34.800	6.808	27.491	1.00102.32	
12505	CA	GLU	C	56	-33.451	6.341	27.793	1.00102.83	
12506	CB	GLU	C	56	-32.410	7.212	27.085	1.00102.82	
12507	CG	GLU	C	56	-31.007	6.628	27.113	1.00103.08	
12508	CD	GLU	C	56	-30.007	7.452	26.323	1.00103.39	
12509	OE1	GLU	C	56	-30.419	8.137	25.361	1.00103.42	
12510	OE2	GLU	C	56	-28.806	7.414	26.666	1.00103.35	
12511	C	GLU	C	56	-33.125	6.244	29.286	1.00103.16	
12512	O	GLU	C	56	-32.614	5.223	29.747	1.00103.16	
12513	N	TYR	C	57	-33.429	7.296	30.039	1.00103.60	
12514	CA	TYR	C	57	-33.060	7.339	31.452	1.00104.14	
12515	CB	TYR	C	57	-32.274	8.618	31.741	1.00104.26	
12516	CG	TYR	C	57	-31.538	9.154	30.534	1.00104.73	
12517	CD1	TYR	C	57	-30.284	8.670	30.187	1.00105.05	
12518	CE1	TYR	C	57	-29.612	9.157	29.086	1.00105.39	
12519	CZ	TYR	C	57	-30.198	10.136	28.309	1.00105.58	
12520	OH	TYR	C	57	-29.536	10.624	27.207	1.00105.78	
12521	CE2	TYR	C	57	-31.443	10.631	28.631	1.00105.37	
12522	CD2	TYR	C	57	-32.105	10.140	29.735	1.00105.19	
12523	C	TYR	C	57	-34.241	7.233	32.413	1.00104.42	
12524	O	TYR	C	57	-34.054	7.177	33.631	1.00104.31	
12525	N	GLY	C	58	-35.453	7.220	31.869	1.00104.74	
12526	CA	GLY	C	58	-36.646	7.090	32.684	1.00105.14	
12527	C	GLY	C	58	-36.773	8.136	33.772	1.00105.47	
12528	O	GLY	C	58	-37.237	7.842	34.876	1.00105.45	
12529	N	ASN	C	59	-36.336	9.355	33.475	1.00105.72	
12530	CA	ASN	C	59	-36.499	10.451	34.417	1.00105.99	
12531	CB	ASN	C	59	-35.227	11.296	34.550	1.00106.00	
12532	CG	ASN	C	59	-34.740	11.844	33.222	1.00106.06	
12533	OD1	ASN	C	59	-34.088	11.140	32.450	1.00106.14	
12534	ND2	ASN	C	59	-35.043	13.111	32.955	1.00105.82	
12535	C	ASN	C	59	-37.689	11.279	33.967	1.00106.15	
12536	O	ASN	C	59	-37.896	11.489	32.769	1.00106.13	

FIGURE 3 IL

A	B	C	D	E	F	G	H	I	J
12537	N	SER	C	60	-38.480	11.741	34.926	1.00106.33	
12538	CA	SER	C	60	-39.705	12.440	34.587	1.00106.60	
12539	CB	SER	C	60	-40.912	11.583	34.988	1.00106.65	
12540	OG	SER	C	60	-40.861	11.233	36.362	1.00106.66	
12541	C	SER	C	60	-39.843	13.834	35.183	1.00106.76	
12542	O	SER	C	60	-38.986	14.306	35.931	1.00106.80	
12543	N	SER	C	61	-40.947	14.478	34.818	1.00106.91	
12544	CA	SER	C	61	-41.322	15.800	35.296	1.00107.07	
12545	CB	SER	C	61	-40.470	16.890	34.641	1.00107.10	
12546	OG	SER	C	61	-40.763	17.021	33.260	1.00107.07	
12547	C	SER	C	61	-42.787	15.987	34.932	1.00107.16	
12548	O	SER	C	61	-43.277	15.379	33.980	1.00107.20	
12549	N	VAL	C	62	-43.499	16.812	35.686	1.00107.27	
12550	CA	VAL	C	62	-44.905	17.029	35.386	1.00107.37	
12551	CB	VAL	C	62	-45.621	17.788	36.516	1.00107.41	
12552	CG1	VAL	C	62	-47.112	17.875	36.229	1.00107.33	
12553	CG2	VAL	C	62	-45.372	17.101	37.853	1.00107.53	
12554	C	VAL	C	62	-45.059	17.773	34.060	1.00107.38	
12555	O	VAL	C	62	-44.532	18.872	33.889	1.00107.30	
12556	N	PHE	C	63	-45.767	17.151	33.122	1.00107.40	
12557	CA	PHE	C	63	-46.012	17.738	31.811	1.00107.44	
12558	CB	PHE	C	63	-46.185	16.632	30.769	1.00107.53	
12559	CG	PHE	C	63	-46.688	17.119	29.446	1.00107.98	
12560	CD1	PHE	C	63	-48.046	17.259	29.218	1.00108.50	
12561	CE1	PHE	C	63	-48.516	17.711	28.002	1.00108.98	
12562	CZ	PHE	C	63	-47.626	18.022	26.988	1.00109.22	
12563	CE2	PHE	C	63	-46.267	17.883	27.200	1.00109.05	
12564	CD2	PHE	C	63	-45.804	17.432	28.425	1.00108.65	
12565	C	PHE	C	63	-47.257	18.611	31.867	1.00107.39	
12566	O	PHE	C	63	-47.290	19.710	31.313	1.00107.31	
12567	N	LEU	C	64	-48.283	18.104	32.541	1.00107.33	
12568	CA	LEU	C	64	-49.533	18.826	32.710	1.00107.32	
12569	CB	LEU	C	64	-50.454	18.603	31.511	1.00107.38	
12570	CG	LEU	C	64	-51.803	19.325	31.585	1.00107.60	
12571	CD1	LEU	C	64	-51.705	20.730	31.002	1.00107.80	
12572	CD2	LEU	C	64	-52.876	18.526	30.875	1.00107.46	
12573	C	LEU	C	64	-50.220	18.352	33.983	1.00107.27	
12574	O	LEU	C	64	-50.797	17.265	34.017	1.00107.32	
12575	N	GLU	C	65	-50.149	19.166	35.029	1.00107.21	
12576	CA	GLU	C	65	-50.766	18.826	36.306	1.00107.13	
12577	CB	GLU	C	65	-50.091	19.587	37.453	1.00107.24	
12578	CG	GLU	C	65	-49.785	21.044	37.142	1.00107.67	
12579	CD	GLU	C	65	-48.961	21.713	38.229	1.00108.31	
12580	OE1	GLU	C	65	-48.763	22.946	38.151	1.00108.55	
12581	OE2	GLU	C	65	-48.511	21.010	39.160	1.00108.38	
12582	C	GLU	C	65	-52.260	19.113	36.283	1.00106.88	
12583	O	GLU	C	65	-52.698	20.108	35.707	1.00106.98	
12584	N	ASN	C	66	-53.046	18.238	36.899	1.00106.55	
12585	CA	ASN	C	66	-54.489	18.448	36.924	1.00106.23	
12586	CB	ASN	C	66	-55.279	17.144	36.781	1.00106.30	
12587	CG	ASN	C	66	-56.035	17.076	35.468	1.00106.39	

FIGURE 3 IM

A	B	C	D	E	F	G	H	I	J
12588	OD1	ASN	C	66	-56.375	18.109	34.892	1.00106.86	
12589	ND2	ASN	C	66	-56.300	15.866	34.988	1.00106.05	
12590	C	ASN	C	66	-54.993	19.297	38.085	1.00105.93	
12591	O	ASN	C	66	-55.491	18.796	39.095	1.00105.90	
12592	N	SER	C	67	-54.824	20.598	37.906	1.00105.45	
12593	CA	SER	C	67	-55.311	21.626	38.804	1.00104.97	
12594	CB	SER	C	67	-54.271	21.980	39.867	1.00105.03	
12595	OG	SER	C	67	-53.194	22.714	39.310	1.00105.01	
12596	C	SER	C	67	-55.478	22.757	37.811	1.00104.56	
12597	O	SER	C	67	-56.058	23.808	38.100	1.00104.55	
12598	N	THR	C	68	-54.952	22.489	36.618	1.00103.87	
12599	CA	THR	C	68	-55.016	23.391	35.483	1.00103.13	
12600	CB	THR	C	68	-54.311	22.743	34.276	1.00103.09	
12601	OG1	THR	C	68	-52.994	22.322	34.651	1.00103.00	
12602	CG2	THR	C	68	-54.058	23.764	33.186	1.00102.99	
12603	C	THR	C	68	-56.469	23.640	35.126	1.00102.68	
12604	O	THR	C	68	-56.892	24.782	34.947	1.00102.68	
12605	N	PHE	C	69	-57.235	22.558	35.041	1.00101.95	
12606	CA	PHE	C	69	-58.630	22.644	34.638	1.00101.21	
12607	CB	PHE	C	69	-58.892	21.651	33.509	1.00101.21	
12608	CG	PHE	C	69	-57.711	21.444	32.609	1.00101.05	
12609	CD1	PHE	C	69	-57.397	22.370	31.635	1.00100.92	
12610	CE1	PHE	C	69	-56.309	22.181	30.808	1.00100.82	
12611	CZ	PHE	C	69	-55.520	21.067	30.952	1.00100.87	
12612	CE2	PHE	C	69	-55.818	20.138	31.924	1.00100.79	
12613	CD2	PHE	C	69	-56.905	20.328	32.747	1.00100.90	
12614	C	PHE	C	69	-59.590	22.384	35.792	1.00100.70	
12615	O	PHE	C	69	-60.725	21.964	35.577	1.00100.64	
12616	N	ASP	C	70	-59.138	22.627	37.017	1.00 99.98	
12617	CA	ASP	C	70	-60.006	22.424	38.169	1.00 99.27	
12618	CB	ASP	C	70	-59.197	22.271	39.460	1.00 99.39	
12619	CG	ASP	C	70	-59.854	21.318	40.455	1.00 99.76	
12620	OD1	ASP	C	70	-60.924	20.756	40.134	1.00100.03	
12621	OD2	ASP	C	70	-59.370	21.062	41.579	1.00100.24	
12622	C	ASP	C	70	-60.985	23.591	38.257	1.00 98.57	
12623	O	ASP	C	70	-61.959	23.550	39.009	1.00 98.63	
12624	N	GLU	C	71	-60.716	24.634	37.477	1.00 97.63	
12625	CA	GLU	C	71	-61.603	25.787	37.407	1.00 96.63	
12626	CB	GLU	C	71	-60.820	27.095	37.545	1.00 96.82	
12627	CG	GLU	C	71	-61.652	28.260	38.068	1.00 97.17	
12628	CD	GLU	C	71	-60.900	29.580	38.045	1.00 97.32	
12629	OE1	GLU	C	71	-59.666	29.558	37.847	1.00 97.16	
12630	OE2	GLU	C	71	-61.545	30.639	38.223	1.00 97.07	
12631	C	GLU	C	71	-62.320	25.722	36.066	1.00 95.71	
12632	O	GLU	C	71	-63.229	26.504	35.787	1.00 95.56	
12633	N	PHE	C	72	-61.888	24.770	35.244	1.00 94.60	
12634	CA	PHE	C	72	-62.489	24.502	33.942	1.00 93.53	
12635	CB	PHE	C	72	-61.793	23.297	33.307	1.00 93.60	
12636	CG	PHE	C	72	-62.130	23.076	31.864	1.00 93.81	
12637	CD1	PHE	C	72	-63.054	22.116	31.498	1.00 94.04	
12638	CE1	PHE	C	72	-63.360	21.900	30.169	1.00 94.09	

FIGURE 3 IN

A	B	C	D	E	F	G	H	I	J
12639	CZ	PHE	C	72	-62.731	22.638	29.188	1.00	94.38
12640	CE2	PHE	C	72	-61.799	23.593	29.540	1.00	94.21
12641	CD2	PHE	C	72	-61.499	23.804	30.872	1.00	94.21
12642	C	PHE	C	72	-63.978	24.214	34.113	1.00	92.54
12643	O	PHE	C	72	-64.765	24.388	33.184	1.00	92.47
12644	N	GLY	C	73	-64.352	23.775	35.313	1.00	91.41
12645	CA	GLY	C	73	-65.739	23.499	35.647	1.00	89.90
12646	C	GLY	C	73	-66.365	22.381	34.840	1.00	88.74
12647	O	GLY	C	73	-67.552	22.428	34.515	1.00	88.78
12648	N	HIS	C	74	-65.564	21.374	34.511	1.00	87.47
12649	CA	HIS	C	74	-66.043	20.227	33.751	1.00	86.07
12650	CB	HIS	C	74	-65.966	20.498	32.247	1.00	86.28
12651	CG	HIS	C	74	-66.952	21.516	31.762	1.00	86.53
12652	ND1	HIS	C	74	-68.316	21.327	31.839	1.00	86.89
12653	CE1	HIS	C	74	-68.934	22.380	31.335	1.00	87.10
12654	NE2	HIS	C	74	-68.020	23.248	30.937	1.00	87.04
12655	CD2	HIS	C	74	-66.772	22.731	31.192	1.00	86.82
12656	C	HIS	C	74	-65.234	18.986	34.092	1.00	84.97
12657	O	HIS	C	74	-64.086	19.079	34.526	1.00	84.75
12658	N	SER	C	75	-65.843	17.823	33.895	1.00	83.51
12659	CA	SER	C	75	-65.185	16.557	34.172	1.00	82.03
12660	CB	SER	C	75	-66.208	15.523	34.642	1.00	82.15
12661	OG	SER	C	75	-65.578	14.437	35.298	1.00	82.05
12662	C	SER	C	75	-64.474	16.083	32.912	1.00	80.94
12663	O	SER	C	75	-65.112	15.751	31.917	1.00	80.85
12664	N	ILE	C	76	-63.148	16.057	32.957	1.00	79.56
12665	CA	ILE	C	76	-62.351	15.692	31.795	1.00	78.15
12666	CB	ILE	C	76	-60.919	16.208	31.960	1.00	78.25
12667	CG1	ILE	C	76	-60.926	17.721	32.212	1.00	77.94
12668	CD1	ILE	C	76	-61.795	18.505	31.254	1.00	77.53
12669	CG2	ILE	C	76	-60.069	15.826	30.750	1.00	78.05
12670	C	ILE	C	76	-62.334	14.190	31.566	1.00	77.39
12671	O	ILE	C	76	-61.799	13.437	32.384	1.00	77.16
12672	N	ASN	C	77	-62.907	13.759	30.445	1.00	76.15
12673	CA	ASN	C	77	-62.969	12.338	30.128	1.00	74.99
12674	CB	ASN	C	77	-64.094	12.040	29.141	1.00	74.99
12675	CG	ASN	C	77	-64.190	10.560	28.802	1.00	74.36
12676	OD1	ASN	C	77	-64.458	9.727	29.672	1.00	73.41
12677	ND2	ASN	C	77	-63.964	10.226	27.534	1.00	73.07
12678	C	ASN	C	77	-61.663	11.829	29.565	1.00	74.31
12679	O	ASN	C	77	-61.214	10.735	29.901	1.00	74.25
12680	N	ASP	C	78	-61.063	12.627	28.693	1.00	73.48
12681	CA	ASP	C	78	-59.792	12.264	28.092	1.00	72.65
12682	CB	ASP	C	78	-59.991	11.266	26.944	1.00	72.58
12683	CG	ASP	C	78	-58.753	10.412	26.688	1.00	72.38
12684	OD1	ASP	C	78	-57.701	10.679	27.312	1.00	72.10
12685	OD2	ASP	C	78	-58.737	9.450	25.890	1.00	71.29
12686	C	ASP	C	78	-59.084	13.504	27.580	1.00	72.15
12687	O	ASP	C	78	-59.661	14.589	27.507	1.00	72.00
12688	N	TYR	C	79	-57.821	13.333	27.231	1.00	71.66
12689	CA	TYR	C	79	-57.038	14.421	26.690	1.00	71.20

FIGURE 3 IO

A	B	C	D	E	F	G	H	I	J
12690	CB	TYR	C	79	-56.058	14.959	27.736	1.00	71.18
12691	CG	TYR	C	79	-54.920	14.014	28.038	1.00	70.81
12692	CD1	TYR	C	79	-54.943	13.210	29.167	1.00	70.70
12693	CE1	TYR	C	79	-53.906	12.342	29.440	1.00	70.91
12694	CZ	TYR	C	79	-52.830	12.272	28.580	1.00	70.37
12695	OH	TYR	C	79	-51.793	11.415	28.852	1.00	70.04
12696	CE2	TYR	C	79	-52.787	13.059	27.457	1.00	70.54
12697	CD2	TYR	C	79	-53.825	13.923	27.192	1.00	70.46
12698	C	TYR	C	79	-56.280	13.905	25.488	1.00	70.82
12699	O	TYR	C	79	-55.973	12.721	25.393	1.00	70.72
12700	N	SER	C	80	-55.995	14.800	24.559	1.00	70.61
12701	CA	SER	C	80	-55.210	14.442	23.398	1.00	70.59
12702	CB	SER	C	80	-56.082	14.333	22.151	1.00	70.42
12703	OG	SER	C	80	-55.362	13.702	21.112	1.00	70.29
12704	C	SER	C	80	-54.155	15.516	23.218	1.00	70.56
12705	O	SER	C	80	-54.443	16.711	23.345	1.00	70.59
12706	N	ILE	C	81	-52.929	15.088	22.948	1.00	70.28
12707	CA	ILE	C	81	-51.834	16.025	22.760	1.00	69.94
12708	CB	ILE	C	81	-50.641	15.660	23.667	1.00	69.93
12709	CG1	ILE	C	81	-50.812	16.325	25.029	1.00	69.77
12710	CD1	ILE	C	81	-50.407	15.458	26.182	1.00	69.81
12711	CG2	ILE	C	81	-49.330	16.115	23.051	1.00	69.84
12712	C	ILE	C	81	-51.419	16.065	21.306	1.00	69.71
12713	O	ILE	C	81	-51.019	15.050	20.739	1.00	69.64
12714	N	SER	C	82	-51.548	17.240	20.702	1.00	69.37
12715	CA	SER	C	82	-51.118	17.436	19.333	1.00	69.33
12716	CB	SER	C	82	-51.173	18.922	18.975	1.00	69.47
12717	OG	SER	C	82	-50.602	19.156	17.699	1.00	69.91
12718	C	SER	C	82	-49.686	16.953	19.252	1.00	68.99
12719	O	SER	C	82	-48.955	17.046	20.232	1.00	69.07
12720	N	PRO	C	83	-49.284	16.418	18.106	1.00	68.64
12721	CA	PRO	C	83	-47.905	15.953	17.926	1.00	68.48
12722	CB	PRO	C	83	-47.888	15.476	16.473	1.00	68.45
12723	CG	PRO	C	83	-49.319	15.151	16.179	1.00	68.52
12724	CD	PRO	C	83	-50.107	16.202	16.905	1.00	68.55
12725	C	PRO	C	83	-46.929	17.111	18.142	1.00	68.19
12726	O	PRO	C	83	-45.824	16.919	18.637	1.00	68.33
12727	N	ASP	C	84	-47.359	18.308	17.769	1.00	67.84
12728	CA	ASP	C	84	-46.595	19.523	17.987	1.00	67.58
12729	CB	ASP	C	84	-47.529	20.723	17.854	1.00	67.54
12730	CG	ASP	C	84	-47.266	21.528	16.622	1.00	68.01
12731	OD1	ASP	C	84	-47.959	22.548	16.437	1.00	68.19
12732	OD2	ASP	C	84	-46.389	21.225	15.787	1.00	68.92
12733	C	ASP	C	84	-46.036	19.584	19.394	1.00	67.29
12734	O	ASP	C	84	-44.822	19.566	19.615	1.00	67.36
12735	N	GLY	C	85	-46.964	19.672	20.341	1.00	66.79
12736	CA	GLY	C	85	-46.658	19.891	21.738	1.00	66.22
12737	C	GLY	C	85	-47.167	21.291	22.043	1.00	65.77
12738	O	GLY	C	85	-46.934	21.835	23.125	1.00	65.89
12739	N	GLN	C	86	-47.868	21.869	21.068	1.00	65.07
12740	CA	GLN	C	86	-48.405	23.228	21.169	1.00	64.48

FIGURE 3 IP

A	B	C	D	E	F	G	H	I	J
12741	CB	GLN	C	86	-48.405	23.908	19.793	1.00	64.40
12742	CG	GLN	C	86	-47.240	24.862	19.572	1.00	64.45
12743	CD	GLN	C	86	-46.995	25.174	18.106	1.00	64.57
12744	OE1	GLN	C	86	-47.669	26.033	17.519	1.00	64.14
12745	NE2	GLN	C	86	-46.025	24.483	17.511	1.00	63.31
12746	C	GLN	C	86	-49.800	23.306	21.787	1.00	64.13
12747	O	GLN	C	86	-50.129	24.272	22.482	1.00	63.89
12748	N	PHE	C	87	-50.629	22.303	21.518	1.00	63.78
12749	CA	PHE	C	87	-51.977	22.289	22.071	1.00	63.29
12750	CB	PHE	C	87	-52.997	22.764	21.033	1.00	63.41
12751	CG	PHE	C	87	-52.694	24.116	20.460	1.00	63.48
12752	CD1	PHE	C	87	-53.320	25.247	20.951	1.00	63.92
12753	CE1	PHE	C	87	-53.038	26.494	20.429	1.00	64.03
12754	CZ	PHE	C	87	-52.123	26.620	19.405	1.00	64.22
12755	CE2	PHE	C	87	-51.493	25.496	18.905	1.00	63.52
12756	CD2	PHE	C	87	-51.781	24.256	19.429	1.00	63.35
12757	C	PHE	C	87	-52.370	20.914	22.589	1.00	62.81
12758	O	PHE	C	87	-51.969	19.889	22.041	1.00	63.11
12759	N	ILE	C	88	-53.144	20.903	23.667	1.00	62.10
12760	CA	ILE	C	88	-53.679	19.668	24.209	1.00	61.22
12761	CB	ILE	C	88	-53.349	19.519	25.715	1.00	61.25
12762	CG1	ILE	C	88	-53.520	18.066	26.166	1.00	61.28
12763	CD1	ILE	C	88	-52.939	17.792	27.538	1.00	60.54
12764	CG2	ILE	C	88	-54.207	20.428	26.559	1.00	60.74
12765	C	ILE	C	88	-55.178	19.709	23.962	1.00	60.82
12766	O	ILE	C	88	-55.808	20.763	24.090	1.00	60.91
12767	N	LEU	C	89	-55.743	18.575	23.567	1.00	60.14
12768	CA	LEU	C	89	-57.174	18.502	23.277	1.00	59.40
12769	CB	LEU	C	89	-57.413	17.581	22.085	1.00	59.54
12770	CG	LEU	C	89	-58.811	17.434	21.502	1.00	59.68
12771	CD1	LEU	C	89	-58.678	16.746	20.158	1.00	59.51
12772	CD2	LEU	C	89	-59.491	18.786	21.345	1.00	60.01
12773	C	LEU	C	89	-57.903	17.987	24.505	1.00	58.58
12774	O	LEU	C	89	-57.472	17.014	25.113	1.00	58.15
12775	N	LEU	C	90	-58.995	18.650	24.874	1.00	57.83
12776	CA	LEU	C	90	-59.740	18.279	26.075	1.00	57.34
12777	CB	LEU	C	90	-59.841	19.466	27.038	1.00	57.40
12778	CG	LEU	C	90	-58.615	19.701	27.921	1.00	57.46
12779	CD1	LEU	C	90	-58.963	20.637	29.065	1.00	57.90
12780	CD2	LEU	C	90	-58.116	18.375	28.456	1.00	57.26
12781	C	LEU	C	90	-61.127	17.701	25.801	1.00	56.84
12782	O	LEU	C	90	-62.034	18.411	25.373	1.00	56.74
12783	N	GLU	C	91	-61.280	16.410	26.089	1.00	56.21
12784	CA	GLU	C	91	-62.530	15.683	25.858	1.00	55.36
12785	CB	GLU	C	91	-62.202	14.265	25.407	1.00	55.13
12786	CG	GLU	C	91	-63.379	13.434	24.921	1.00	55.49
12787	CD	GLU	C	91	-62.941	12.049	24.461	1.00	55.86
12788	OE1	GLU	C	91	-62.638	11.198	25.323	1.00	55.96
12789	OE2	GLU	C	91	-62.877	11.811	23.239	1.00	56.22
12790	C	GLU	C	91	-63.419	15.640	27.104	1.00	54.78
12791	O	GLU	C	91	-62.987	15.205	28.172	1.00	55.13

FIGURE 3 IQ

A	B	C	D	E	F	G	H	I	J
12792	N	TYR	C	92	-64.657	16.098	26.960	1.00	53.96
12793	CA	TYR	C	92	-65.634	16.063	28.047	1.00	53.29
12794	CB	TYR	C	92	-65.451	17.234	29.024	1.00	53.45
12795	CG	TYR	C	92	-65.739	18.600	28.444	1.00	52.87
12796	CD1	TYR	C	92	-64.948	19.124	27.428	1.00	52.94
12797	CE1	TYR	C	92	-65.196	20.372	26.907	1.00	52.73
12798	CZ	TYR	C	92	-66.246	21.113	27.395	1.00	52.65
12799	OH	TYR	C	92	-66.495	22.352	26.857	1.00	54.21
12800	CE2	TYR	C	92	-67.046	20.619	28.405	1.00	51.62
12801	CD2	TYR	C	92	-66.788	19.372	28.925	1.00	51.67
12802	C	TYR	C	92	-67.059	16.007	27.503	1.00	52.56
12803	O	TYR	C	92	-67.261	15.962	26.295	1.00	52.30
12804	N	ASN	C	93	-68.044	16.006	28.395	1.00	51.97
12805	CA	ASN	C	93	-69.439	15.858	27.974	1.00	51.25
12806	CB	ASN	C	93	-69.919	17.086	27.211	1.00	51.25
12807	CG	ASN	C	93	-70.276	18.237	28.131	1.00	51.22
12808	OD1	ASN	C	93	-70.130	18.137	29.348	1.00	50.55
12809	ND2	ASN	C	93	-70.758	19.334	27.554	1.00	51.19
12810	C	ASN	C	93	-69.609	14.592	27.129	1.00	50.67
12811	O	ASN	C	93	-70.381	14.547	26.188	1.00	50.59
12812	N	TYR	C	94	-68.861	13.566	27.499	1.00	50.06
12813	CA	TYR	C	94	-68.848	12.295	26.808	1.00	49.66
12814	CB	TYR	C	94	-67.625	11.511	27.290	1.00	49.61
12815	CG	TYR	C	94	-67.635	10.039	26.969	1.00	50.89
12816	CD1	TYR	C	94	-66.979	9.553	25.851	1.00	50.78
12817	CE1	TYR	C	94	-66.978	8.206	25.552	1.00	51.62
12818	CZ	TYR	C	94	-67.631	7.321	26.375	1.00	52.07
12819	OH	TYR	C	94	-67.624	5.973	26.066	1.00	53.02
12820	CE2	TYR	C	94	-68.285	7.777	27.503	1.00	51.93
12821	CD2	TYR	C	94	-68.280	9.126	27.799	1.00	51.61
12822	C	TYR	C	94	-70.116	11.467	27.040	1.00	49.15
12823	O	TYR	C	94	-70.529	11.258	28.183	1.00	49.10
12824	N	VAL	C	95	-70.745	11.027	25.955	1.00	47.85
12825	CA	VAL	C	95	-71.845	10.072	26.056	1.00	47.07
12826	CB	VAL	C	95	-73.258	10.703	25.945	1.00	47.35
12827	CG1	VAL	C	95	-73.203	12.217	26.129	1.00	47.00
12828	CG2	VAL	C	95	-73.929	10.329	24.639	1.00	47.41
12829	C	VAL	C	95	-71.643	8.972	25.012	1.00	46.09
12830	O	VAL	C	95	-71.511	9.236	23.822	1.00	45.81
12831	N	LYS	C	96	-71.587	7.736	25.486	1.00	45.36
12832	CA	LYS	C	96	-71.331	6.581	24.631	1.00	44.41
12833	CB	LYS	C	96	-71.034	5.352	25.501	1.00	44.27
12834	CG	LYS	C	96	-70.908	4.033	24.759	1.00	43.31
12835	CD	LYS	C	96	-70.429	2.911	25.690	1.00	41.68
12836	CE	LYS	C	96	-70.680	1.537	25.060	1.00	41.73
12837	NZ	LYS	C	96	-72.135	1.379	24.701	1.00	40.16
12838	C	LYS	C	96	-72.472	6.269	23.677	1.00	43.96
12839	O	LYS	C	96	-73.655	6.418	24.012	1.00	43.57
12840	N	GLN	C	97	-72.105	5.852	22.474	1.00	43.47
12841	CA	GLN	C	97	-73.094	5.341	21.536	1.00	43.11
12842	CB	GLN	C	97	-72.990	6.010	20.162	1.00	43.52



FIGURE 3 IR

A	B	C	D	E	F	G	H	I	J
12843	CG	GLN	C	97	-74.137	5.683	19.214	1.00	45.18
12844	CD	GLN	C	97	-74.129	6.546	17.944	1.00	48.17
12845	OE1	GLN	C	97	-75.119	7.220	17.635	1.00	49.06
12846	NE2	GLN	C	97	-73.015	6.523	17.211	1.00	47.49
12847	C	GLN	C	97	-72.856	3.841	21.463	1.00	42.21
12848	O	GLN	C	97	-73.284	3.105	22.353	1.00	42.31
12849	N	TRP	C	98	-72.130	3.381	20.452	1.00	40.98
12850	CA	TRP	C	98	-71.914	1.946	20.320	1.00	40.00
12851	CB	TRP	C	98	-72.023	1.491	18.865	1.00	39.57
12852	CG	TRP	C	98	-73.243	2.019	18.198	1.00	37.44
12853	CD1	TRP	C	98	-73.310	2.611	16.979	1.00	36.49
12854	NE1	TRP	C	98	-74.605	2.979	16.697	1.00	34.62
12855	CE2	TRP	C	98	-75.404	2.641	17.756	1.00	35.69
12856	CD2	TRP	C	98	-74.579	2.034	18.723	1.00	35.77
12857	CE3	TRP	C	98	-75.168	1.583	19.911	1.00	33.97
12858	CZ3	TRP	C	98	-76.523	1.750	20.089	1.00	32.14
12859	CH2	TRP	C	98	-77.313	2.354	19.116	1.00	34.11
12860	CZ2	TRP	C	98	-76.779	2.807	17.940	1.00	35.02
12861	C	TRP	C	98	-70.606	1.510	20.935	1.00	39.85
12862	O	TRP	C	98	-70.169	2.087	21.922	1.00	40.10
12863	N	ARG	C	99	-69.988	0.486	20.366	1.00	39.89
12864	CA	ARG	C	99	-68.743	-0.035	20.917	1.00	40.14
12865	CB	ARG	C	99	-68.310	-1.305	20.189	1.00	40.11
12866	CG	ARG	C	99	-67.364	-2.170	21.017	1.00	40.05
12867	CD	ARG	C	99	-66.735	-3.348	20.285	1.00	38.41
12868	NE	ARG	C	99	-67.679	-4.417	19.962	1.00	40.14
12869	CZ	ARG	C	99	-68.053	-5.383	20.801	1.00	41.00
12870	NH1	ARG	C	99	-67.585	-5.415	22.045	1.00	42.47
12871	NH2	ARG	C	99	-68.902	-6.321	20.402	1.00	39.62
12872	C	ARG	C	99	-67.606	0.987	20.916	1.00	40.49
12873	O	ARG	C	99	-66.840	1.085	21.887	1.00	40.62
12874	N	HIS	C	100	-67.501	1.756	19.841	1.00	40.70
12875	CA	HIS	C	100	-66.421	2.734	19.722	1.00	41.29
12876	CB	HIS	C	100	-65.599	2.459	18.469	1.00	40.60
12877	CG	HIS	C	100	-65.231	1.020	18.299	1.00	38.97
12878	ND1	HIS	C	100	-64.288	0.395	19.086	1.00	37.10
12879	CE1	HIS	C	100	-64.175	-0.867	18.713	1.00	35.78
12880	NE2	HIS	C	100	-65.013	-1.082	17.715	1.00	35.69
12881	CD2	HIS	C	100	-65.686	0.081	17.439	1.00	35.77
12882	C	HIS	C	100	-66.976	4.139	19.652	1.00	42.16
12883	O	HIS	C	100	-66.473	5.054	20.307	1.00	42.53
12884	N	SER	C	101	-68.032	4.297	18.869	1.00	43.15
12885	CA	SER	C	101	-68.658	5.593	18.680	1.00	44.52
12886	CB	SER	C	101	-69.843	5.486	17.723	1.00	44.35
12887	OG	SER	C	101	-70.720	4.438	18.086	1.00	45.12
12888	C	SER	C	101	-69.100	6.274	19.973	1.00	45.50
12889	O	SER	C	101	-69.524	5.623	20.934	1.00	46.06
12890	N	TYR	C	102	-68.986	7.595	19.979	1.00	46.20
12891	CA	TYR	C	102	-69.420	8.399	21.091	1.00	46.87
12892	CB	TYR	C	102	-68.534	8.212	22.318	1.00	46.91
12893	CG	TYR	C	102	-67.088	8.668	22.209	1.00	46.66

FIGURE 3 IS

A	B	C	D	E	F	G	H	I	J
12894	CD1	TYR	C	102	-66.716	9.954	22.573	1.00	46.77
12895	CE1	TYR	C	102	-65.389	10.366	22.518	1.00	47.77
12896	CZ	TYR	C	102	-64.410	9.478	22.104	1.00	48.33
12897	OH	TYR	C	102	-63.093	9.887	22.044	1.00	48.76
12898	CE2	TYR	C	102	-64.750	8.188	21.751	1.00	47.47
12899	CD2	TYR	C	102	-66.086	7.787	21.813	1.00	47.17
12900	C	TYR	C	102	-69.457	9.848	20.679	1.00	47.85
12901	O	TYR	C	102	-68.892	10.239	19.661	1.00	48.16
12902	N	THR	C	103	-70.129	10.639	21.495	1.00	48.55
12903	CA	THR	C	103	-70.290	12.046	21.250	1.00	49.29
12904	CB	THR	C	103	-71.797	12.334	21.160	1.00	49.45
12905	OG1	THR	C	103	-72.180	12.433	19.778	1.00	49.34
12906	CG2	THR	C	103	-72.137	13.680	21.736	1.00	49.38
12907	C	THR	C	103	-69.615	12.779	22.401	1.00	50.01
12908	O	THR	C	103	-69.586	12.265	23.527	1.00	49.63
12909	N	ALA	C	104	-69.031	13.948	22.122	1.00	51.05
12910	CA	ALA	C	104	-68.338	14.713	23.173	1.00	52.17
12911	CB	ALA	C	104	-67.017	14.049	23.529	1.00	52.10
12912	C	ALA	C	104	-68.108	16.189	22.875	1.00	53.01
12913	O	ALA	C	104	-68.158	16.621	21.722	1.00	52.89
12914	N	SER	C	105	-67.868	16.957	23.940	1.00	54.39
12915	CA	SER	C	105	-67.531	18.383	23.840	1.00	55.36
12916	CB	SER	C	105	-68.091	19.173	25.024	1.00	55.27
12917	OG	SER	C	105	-69.443	19.526	24.819	1.00	54.42
12918	C	SER	C	105	-66.013	18.517	23.819	1.00	56.28
12919	O	SER	C	105	-65.304	17.631	24.296	1.00	56.13
12920	N	TYR	C	106	-65.512	19.623	23.276	1.00	57.55
12921	CA	TYR	C	106	-64.067	19.808	23.170	1.00	58.72
12922	CB	TYR	C	106	-63.559	19.248	21.847	1.00	58.56
12923	CG	TYR	C	106	-63.817	17.779	21.663	1.00	58.33
12924	CD1	TYR	C	106	-64.997	17.329	21.092	1.00	58.17
12925	CE1	TYR	C	106	-65.234	15.981	20.921	1.00	58.20
12926	CZ	TYR	C	106	-64.286	15.068	21.322	1.00	58.18
12927	OH	TYR	C	106	-64.516	13.726	21.154	1.00	59.07
12928	CE2	TYR	C	106	-63.104	15.489	21.889	1.00	58.09
12929	CD2	TYR	C	106	-62.875	16.837	22.055	1.00	58.36
12930	C	TYR	C	106	-63.571	21.246	23.326	1.00	59.83
12931	O	TYR	C	106	-64.215	22.210	22.889	1.00	59.62
12932	N	ASP	C	107	-62.405	21.362	23.954	1.00	61.22
12933	CA	ASP	C	107	-61.728	22.637	24.140	1.00	62.67
12934	CB	ASP	C	107	-62.012	23.218	25.518	1.00	62.73
12935	CG	ASP	C	107	-63.321	23.943	25.569	1.00	63.36
12936	OD1	ASP	C	107	-63.625	24.676	24.607	1.00	64.09
12937	OD2	ASP	C	107	-64.117	23.839	26.522	1.00	65.12
12938	C	ASP	C	107	-60.242	22.424	23.980	1.00	63.58
12939	O	ASP	C	107	-59.662	21.539	24.604	1.00	63.69
12940	N	ILE	C	108	-59.628	23.229	23.126	1.00	64.96
12941	CA	ILE	C	108	-58.202	23.121	22.893	1.00	66.25
12942	CB	ILE	C	108	-57.879	23.481	21.443	1.00	65.94
12943	CG1	ILE	C	108	-58.709	22.609	20.500	1.00	65.80
12944	CD1	ILE	C	108	-58.971	23.240	19.159	1.00	65.86

FIGURE 3 IT

A	B	C	D	E	F	G	H	I	J
12945	CG2	ILE	C	108	-56.401	23.306	21.181	1.00	65.68
12946	C	ILE	C	108	-57.478	24.054	23.839	1.00	67.51
12947	O	ILE	C	108	-57.905	25.188	24.043	1.00	67.62
12948	N	TYR	C	109	-56.398	23.572	24.437	1.00	69.30
12949	CA	TYR	C	109	-55.617	24.417	25.321	1.00	71.29
12950	CB	TYR	C	109	-55.408	23.777	26.692	1.00	71.59
12951	CG	TYR	C	109	-56.374	24.280	27.738	1.00	73.01
12952	CD1	TYR	C	109	-55.963	24.502	29.048	1.00	74.40
12953	CE1	TYR	C	109	-56.852	24.970	30.009	1.00	74.66
12954	CZ	TYR	C	109	-58.166	25.218	29.663	1.00	75.26
12955	OH	TYR	C	109	-59.062	25.682	30.608	1.00	75.96
12956	CE2	TYR	C	109	-58.590	25.009	28.367	1.00	75.10
12957	CD2	TYR	C	109	-57.697	24.546	27.414	1.00	74.15
12958	C	TYR	C	109	-54.288	24.747	24.696	1.00	72.29
12959	O	TYR	C	109	-53.488	23.857	24.403	1.00	72.28
12960	N	ASP	C	110	-54.079	26.042	24.478	1.00	73.72
12961	CA	ASP	C	110	-52.831	26.553	23.947	1.00	75.06
12962	CB	ASP	C	110	-52.958	28.051	23.675	1.00	75.46
12963	CG	ASP	C	110	-51.890	28.569	22.727	1.00	76.76
12964	OD1	ASP	C	110	-50.784	27.976	22.687	1.00	77.78
12965	OD2	ASP	C	110	-52.074	29.563	21.983	1.00	77.35
12966	C	ASP	C	110	-51.790	26.318	25.013	1.00	75.66
12967	O	ASP	C	110	-51.772	27.018	26.029	1.00	75.84
12968	N	LEU	C	111	-50.935	25.324	24.793	1.00	76.33
12969	CA	LEU	C	111	-49.922	24.963	25.776	1.00	77.04
12970	CB	LEU	C	111	-49.176	23.692	25.349	1.00	77.25
12971	CG	LEU	C	111	-50.057	22.435	25.344	1.00	77.29
12972	CD1	LEU	C	111	-50.657	22.202	26.721	1.00	77.62
12973	CD2	LEU	C	111	-49.292	21.211	24.895	1.00	77.54
12974	C	LEU	C	111	-48.958	26.109	26.072	1.00	77.48
12975	O	LEU	C	111	-47.799	25.885	26.437	1.00	77.49
12976	N	ASN	C	112	-49.460	27.335	25.920	1.00	77.89
12977	CA	ASN	C	112	-48.705	28.548	26.222	1.00	78.28
12978	CB	ASN	C	112	-49.549	29.800	25.933	1.00	78.48
12979	CG	ASN	C	112	-49.420	30.283	24.491	1.00	79.52
12980	OD1	ASN	C	112	-48.766	29.644	23.656	1.00	79.74
12981	ND2	ASN	C	112	-50.042	31.426	24.194	1.00	80.43
12982	C	ASN	C	112	-48.242	28.572	27.672	1.00	78.15
12983	O	ASN	C	112	-47.801	27.558	28.215	1.00	78.08
12984	N	LEU	C	116	-57.788	28.279	27.447	1.00	72.85
12985	CA	LEU	C	116	-58.622	27.775	26.320	1.00	73.03
12986	CB	LEU	C	116	-60.118	27.840	26.658	1.00	73.20
12987	CG	LEU	C	116	-60.755	27.158	27.865	1.00	73.68
12988	CD1	LEU	C	116	-60.610	28.027	29.102	1.00	74.21
12989	CD2	LEU	C	116	-62.232	26.880	27.580	1.00	74.11
12990	C	LEU	C	116	-58.417	28.597	25.061	1.00	72.91
12991	O	LEU	C	116	-58.267	29.816	25.128	1.00	73.02
12992	N	ILE	C	117	-58.421	27.928	23.912	1.00	72.67
12993	CA	ILE	C	117	-58.425	28.618	22.632	1.00	72.45
12994	CB	ILE	C	117	-57.975	27.683	21.504	1.00	72.61
12995	CG1	ILE	C	117	-56.454	27.512	21.518	1.00	73.05

FIGURE 3 IU

A	B	C	D	E	F	G	H	I	J
12996	CD1	ILE	C	117	-55.705	28.625	20.803	1.00	74.03
12997	CG2	ILE	C	117	-58.392	28.244	20.176	1.00	72.78
12998	C	ILE	C	117	-59.878	29.039	22.447	1.00	72.09
12999	O	ILE	C	117	-60.611	28.510	21.611	1.00	72.22
13000	N	THR	C	118	-60.260	30.018	23.255	1.00	71.59
13001	CA	THR	C	118	-61.625	30.525	23.406	1.00	70.99
13002	CB	THR	C	118	-61.581	31.705	24.411	1.00	71.18
13003	OG1	THR	C	118	-60.444	32.533	24.120	1.00	71.21
13004	CG2	THR	C	118	-61.300	31.209	25.827	1.00	71.20
13005	C	THR	C	118	-62.466	30.982	22.205	1.00	70.46
13006	O	THR	C	118	-63.677	31.133	22.345	1.00	70.38
13007	N	GLU	C	119	-61.878	31.205	21.037	1.00	69.97
13008	CA	GLU	C	119	-62.673	31.849	19.983	1.00	69.55
13009	CB	GLU	C	119	-61.932	33.047	19.367	1.00	69.69
13010	CG	GLU	C	119	-60.421	32.915	19.326	1.00	70.24
13011	CD	GLU	C	119	-59.737	33.583	20.506	1.00	70.72
13012	OE1	GLU	C	119	-59.435	32.886	21.500	1.00	70.24
13013	OE2	GLU	C	119	-59.490	34.808	20.430	1.00	71.20
13014	C	GLU	C	119	-63.362	31.014	18.891	1.00	69.00
13015	O	GLU	C	119	-64.503	31.305	18.540	1.00	69.14
13016	N	GLU	C	120	-62.703	30.021	18.313	1.00	68.21
13017	CA	GLU	C	120	-63.401	29.246	17.282	1.00	67.56
13018	CB	GLU	C	120	-62.805	29.470	15.893	1.00	67.51
13019	CG	GLU	C	120	-63.862	29.756	14.832	1.00	68.37
13020	CD	GLU	C	120	-64.326	31.210	14.806	1.00	69.69
13021	OE1	GLU	C	120	-64.261	31.841	13.732	1.00	69.90
13022	OE2	GLU	C	120	-64.769	31.733	15.851	1.00	70.32
13023	C	GLU	C	120	-63.460	27.778	17.670	1.00	66.68
13024	O	GLU	C	120	-62.815	26.917	17.068	1.00	66.69
13025	N	ARG	C	121	-64.275	27.522	18.685	1.00	65.57
13026	CA	ARG	C	121	-64.354	26.222	19.335	1.00	64.49
13027	CB	ARG	C	121	-65.061	26.364	20.689	1.00	64.55
13028	CG	ARG	C	121	-64.452	27.442	21.585	1.00	64.75
13029	CD	ARG	C	121	-65.300	27.805	22.800	1.00	65.21
13030	NE	ARG	C	121	-65.021	26.952	23.950	1.00	65.00
13031	CZ	ARG	C	121	-65.920	26.630	24.877	1.00	66.10
13032	NH1	ARG	C	121	-67.163	27.087	24.789	1.00	65.99
13033	NH2	ARG	C	121	-65.582	25.845	25.894	1.00	65.23
13034	C	ARG	C	121	-65.012	25.111	18.538	1.00	63.57
13035	O	ARG	C	121	-65.839	25.345	17.660	1.00	63.20
13036	N	ILE	C	122	-64.598	23.890	18.855	1.00	62.51
13037	CA	ILE	C	122	-65.208	22.702	18.308	1.00	61.37
13038	CB	ILE	C	122	-64.399	21.478	18.736	1.00	61.26
13039	CG1	ILE	C	122	-62.913	21.829	18.716	1.00	60.66
13040	CD1	ILE	C	122	-62.009	20.698	19.115	1.00	60.52
13041	CG2	ILE	C	122	-64.685	20.295	17.815	1.00	61.13
13042	C	ILE	C	122	-66.597	22.694	18.928	1.00	60.55
13043	O	ILE	C	122	-66.759	23.084	20.080	1.00	60.58
13044	N	PRO	C	123	-67.604	22.276	18.174	1.00	59.69
13045	CA	PRO	C	123	-68.977	22.310	18.676	1.00	59.11
13046	CB	PRO	C	123	-69.817	22.019	17.426	1.00	58.99

FIGURE 3 IV

A	B	C	D	E	F	G	H	I	J
13047	CG	PRO	C	123	-68.870	22.088	16.277	1.00	59.33
13048	CD	PRO	C	123	-67.523	21.724	16.813	1.00	59.59
13049	C	PRO	C	123	-69.231	21.228	19.706	1.00	58.59
13050	O	PRO	C	123	-68.406	20.341	19.924	1.00	58.31
13051	N	ASN	C	124	-70.373	21.325	20.363	1.00	58.45
13052	CA	ASN	C	124	-70.813	20.269	21.245	1.00	58.10
13053	CB	ASN	C	124	-71.924	20.760	22.162	1.00	58.65
13054	CG	ASN	C	124	-71.466	21.851	23.095	1.00	59.63
13055	OD1	ASN	C	124	-70.567	21.649	23.906	1.00	59.75
13056	ND2	ASN	C	124	-72.091	23.019	22.990	1.00	64.70
13057	C	ASN	C	124	-71.344	19.177	20.333	1.00	57.46
13058	O	ASN	C	124	-71.618	19.433	19.163	1.00	57.30
13059	N	ASN	C	125	-71.480	17.969	20.863	1.00	56.89
13060	CA	ASN	C	125	-71.981	16.833	20.094	1.00	56.19
13061	CB	ASN	C	125	-73.430	17.064	19.680	1.00	56.17
13062	CG	ASN	C	125	-74.289	17.504	20.846	1.00	56.48
13063	OD1	ASN	C	125	-74.937	18.551	20.798	1.00	56.88
13064	ND2	ASN	C	125	-74.284	16.710	21.915	1.00	56.45
13065	C	ASN	C	125	-71.098	16.504	18.900	1.00	55.61
13066	O	ASN	C	125	-71.574	16.143	17.833	1.00	55.57
13067	N	THR	C	126	-69.797	16.644	19.100	1.00	55.23
13068	CA	THR	C	126	-68.830	16.329	18.073	1.00	54.84
13069	CB	THR	C	126	-67.497	17.039	18.363	1.00	54.72
13070	OG1	THR	C	126	-67.605	18.412	17.970	1.00	54.23
13071	CG2	THR	C	126	-66.397	16.517	17.471	1.00	54.53
13072	C	THR	C	126	-68.667	14.819	18.042	1.00	54.86
13073	O	THR	C	126	-68.356	14.185	19.050	1.00	54.70
13074	N	GLN	C	127	-68.894	14.240	16.877	1.00	54.60
13075	CA	GLN	C	127	-68.852	12.803	16.762	1.00	54.57
13076	CB	GLN	C	127	-69.593	12.375	15.503	1.00	54.28
13077	CG	GLN	C	127	-71.073	12.662	15.594	1.00	53.62
13078	CD	GLN	C	127	-71.724	12.794	14.246	1.00	52.92
13079	OE1	GLN	C	127	-72.550	11.963	13.865	1.00	52.32
13080	NE2	GLN	C	127	-71.354	13.837	13.509	1.00	52.15
13081	C	GLN	C	127	-67.428	12.273	16.775	1.00	54.94
13082	O	GLN	C	127	-67.185	11.331	17.157	1.00	54.88
13083	N	TRP	C	128	-66.482	13.113	16.381	1.00	55.24
13084	CA	TRP	C	128	-65.099	12.676	16.320	1.00	55.48
13085	CB	TRP	C	128	-64.951	11.596	15.251	1.00	55.52
13086	CG	TRP	C	128	-63.633	10.934	15.266	1.00	56.77
13087	CD1	TRP	C	128	-62.667	11.014	14.313	1.00	58.86
13088	NE1	TRP	C	128	-61.577	10.259	14.677	1.00	59.53
13089	CE2	TRP	C	128	-61.828	9.677	15.890	1.00	58.49
13090	CD2	TRP	C	128	-63.115	10.080	16.289	1.00	57.94
13091	CE3	TRP	C	128	-63.611	9.612	17.509	1.00	58.71
13092	CZ3	TRP	C	128	-62.824	8.774	18.271	1.00	59.78
13093	CH2	TRP	C	128	-61.551	8.395	17.847	1.00	59.92
13094	CZ2	TRP	C	128	-61.035	8.835	16.660	1.00	59.64
13095	C	TRP	C	128	-64.156	13.823	15.992	1.00	55.45
13096	O	TRP	C	128	-64.452	14.658	15.136	1.00	55.42
13097	N	VAL	C	129	-63.018	13.843	16.671	1.00	55.32

FIGURE 3 IW

A	B	C	D	E	F	G	H	I	J
13098	CA	VAL	C	129	-61.986	14.829	16.422	1.00	55.59
13099	CB	VAL	C	129	-61.949	15.905	17.531	1.00	55.60
13100	CG1	VAL	C	129	-61.742	15.267	18.884	1.00	55.55
13101	CG2	VAL	C	129	-60.864	16.940	17.255	1.00	56.02
13102	C	VAL	C	129	-60.653	14.095	16.335	1.00	55.72
13103	O	VAL	C	129	-60.476	13.047	16.954	1.00	55.44
13104	N	THR	C	130	-59.729	14.625	15.538	1.00	56.17
13105	CA	THR	C	130	-58.405	14.023	15.409	1.00	56.54
13106	CB	THR	C	130	-58.451	12.757	14.530	1.00	56.52
13107	OG1	THR	C	130	-57.128	12.217	14.393	1.00	56.16
13108	CG2	THR	C	130	-58.830	13.111	13.109	1.00	56.50
13109	C	THR	C	130	-57.358	15.001	14.878	1.00	56.96
13110	O	THR	C	130	-57.617	15.783	13.956	1.00	56.86
13111	N	TRP	C	131	-56.174	14.946	15.482	1.00	57.31
13112	CA	TRP	C	131	-55.056	15.785	15.081	1.00	57.40
13113	CB	TRP	C	131	-53.959	15.760	16.151	1.00	57.50
13114	CG	TRP	C	131	-54.317	16.396	17.461	1.00	58.30
13115	CD1	TRP	C	131	-54.499	15.762	18.664	1.00	58.41
13116	NE1	TRP	C	131	-54.807	16.681	19.639	1.00	58.17
13117	CE2	TRP	C	131	-54.818	17.934	19.083	1.00	58.67
13118	CD2	TRP	C	131	-54.506	17.793	17.716	1.00	58.57
13119	CE3	TRP	C	131	-54.453	18.946	16.921	1.00	58.81
13120	CE3	TRP	C	131	-54.711	20.166	17.499	1.00	58.54
13121	CH2	TRP	C	131	-55.016	20.273	18.859	1.00	59.18
13122	CZ2	TRP	C	131	-55.072	19.173	19.667	1.00	59.24
13123	C	TRP	C	131	-54.446	15.275	13.784	1.00	57.38
13124	O	TRP	C	131	-54.501	14.082	13.486	1.00	56.87
13125	N	SER	C	132	-53.862	16.188	13.015	1.00	57.38
13126	CA	SER	C	132	-53.080	15.789	11.863	1.00	57.68
13127	CB	SER	C	132	-52.697	17.005	11.005	1.00	57.84
13128	OG	SER	C	132	-52.495	18.182	11.784	1.00	58.32
13129	C	SER	C	132	-51.849	15.095	12.449	1.00	57.53
13130	O	SER	C	132	-51.420	15.430	13.546	1.00	57.64
13131	N	PRO	C	133	-51.296	14.111	11.749	1.00	57.57
13132	CA	PRO	C	133	-50.139	13.365	12.266	1.00	57.76
13133	CB	PRO	C	133	-49.718	12.509	11.069	1.00	57.70
13134	CG	PRO	C	133	-50.994	12.317	10.311	1.00	57.42
13135	CD	PRO	C	133	-51.724	13.626	10.426	1.00	57.16
13136	C	PRO	C	133	-48.996	14.279	12.736	1.00	57.88
13137	O	PRO	C	133	-48.184	13.874	13.572	1.00	57.68
13138	N	VAL	C	134	-48.937	15.491	12.191	1.00	57.83
13139	CA	VAL	C	134	-47.950	16.480	12.610	1.00	57.77
13140	CB	VAL	C	134	-46.685	16.463	11.728	1.00	57.86
13141	CG1	VAL	C	134	-45.978	15.112	11.823	1.00	58.17
13142	CG2	VAL	C	134	-47.035	16.790	10.300	1.00	58.15
13143	C	VAL	C	134	-48.583	17.867	12.595	1.00	57.57
13144	O	VAL	C	134	-49.660	18.063	12.039	1.00	57.41
13145	N	GLY	C	135	-47.914	18.829	13.214	1.00	57.66
13146	CA	GLY	C	135	-48.456	20.169	13.302	1.00	57.49
13147	C	GLY	C	135	-49.556	20.207	14.343	1.00	57.41
13148	O	GLY	C	135	-49.412	19.628	15.415	1.00	57.15

FIGURE 3 IX

A	B	C	D	E	F	G	H	I	J
13149	N	HIS	C	136	-50.668	20.865	14.020	1.00	57.40
13150	CA	HIS	C	136	-51.773	20.985	14.958	1.00	57.21
13151	CB	HIS	C	136	-51.468	22.047	16.021	1.00	57.41
13152	CG	HIS	C	136	-51.200	23.405	15.453	1.00	57.87
13153	ND1	HIS	C	136	-50.000	24.059	15.629	1.00	58.41
13154	CE1	HIS	C	136	-50.047	25.231	15.020	1.00	59.02
13155	NE2	HIS	C	136	-51.233	25.359	14.452	1.00	59.14
13156	CD2	HIS	C	136	-51.973	24.229	14.707	1.00	58.12
13157	C	HIS	C	136	-53.084	21.319	14.266	1.00	57.18
13158	O	HIS	C	136	-53.943	22.003	14.832	1.00	56.92
13159	N	LYS	C	137	-53.244	20.863	13.032	1.00	57.03
13160	CA	LYS	C	137	-54.523	21.054	12.380	1.00	56.76
13161	CB	LYS	C	137	-54.452	20.687	10.901	1.00	57.13
13162	CG	LYS	C	137	-53.463	21.525	10.120	1.00	57.71
13163	CD	LYS	C	137	-52.546	20.632	9.315	1.00	58.82
13164	CE	LYS	C	137	-53.113	20.322	7.953	1.00	59.49
13165	NZ	LYS	C	137	-52.678	21.354	6.968	1.00	60.71
13166	C	LYS	C	137	-55.475	20.127	13.105	1.00	56.27
13167	O	LYS	C	137	-55.052	19.210	13.814	1.00	56.04
13168	N	LEU	C	138	-56.765	20.364	12.937	1.00	55.81
13169	CA	LEU	C	138	-57.748	19.530	13.597	1.00	55.19
13170	CB	LEU	C	138	-58.337	20.289	14.789	1.00	55.17
13171	CG	LEU	C	138	-58.471	19.443	16.051	1.00	56.07
13172	CD1	LEU	C	138	-57.533	18.247	15.967	1.00	56.68
13173	CD2	LEU	C	138	-58.210	20.259	17.306	1.00	55.13
13174	C	LEU	C	138	-58.847	19.111	12.630	1.00	54.43
13175	O	LEU	C	138	-59.386	19.938	11.905	1.00	54.06
13176	N	ALA	C	139	-59.151	17.819	12.608	1.00	53.92
13177	CA	ALA	C	139	-60.272	17.307	11.824	1.00	53.53
13178	CB	ALA	C	139	-59.821	16.214	10.843	1.00	53.27
13179	C	ALA	C	139	-61.313	16.761	12.790	1.00	53.15
13180	O	ALA	C	139	-60.997	15.958	13.665	1.00	53.00
13181	N	TYR	C	140	-62.549	17.225	12.656	1.00	53.01
13182	CA	TYR	C	140	-63.622	16.731	13.504	1.00	52.78
13183	CB	TYR	C	140	-63.869	17.665	14.700	1.00	53.01
13184	CG	TYR	C	140	-64.420	19.026	14.342	1.00	52.54
13185	CD1	TYR	C	140	-65.787	19.241	14.228	1.00	52.06
13186	CE1	TYR	C	140	-66.291	20.492	13.904	1.00	51.90
13187	CZ	TYR	C	140	-65.413	21.552	13.696	1.00	51.95
13188	OH	TYR	C	140	-65.882	22.805	13.368	1.00	50.71
13189	CE2	TYR	C	140	-64.059	21.359	13.814	1.00	51.61
13190	CD2	TYR	C	140	-63.568	20.102	14.136	1.00	52.80
13191	C	TYR	C	140	-64.906	16.535	12.718	1.00	52.60
13192	O	TYR	C	140	-65.132	17.186	11.698	1.00	52.33
13193	N	VAL	C	141	-65.749	15.628	13.208	1.00	52.44
13194	CA	VAL	C	141	-67.033	15.354	12.574	1.00	51.54
13195	CB	VAL	C	141	-67.191	13.870	12.258	1.00	51.37
13196	CG1	VAL	C	141	-66.079	13.422	11.339	1.00	50.66
13197	CG2	VAL	C	141	-68.543	13.601	11.623	1.00	50.88
13198	C	VAL	C	141	-68.169	15.835	13.466	1.00	51.43
13199	O	VAL	C	141	-68.195	15.557	14.663	1.00	51.69

FIGURE 3 IY

A	B	C	D	E	F	G	H	I	J
13200	N	TRP	C	142	-69.103	16.572	12.883	1.00	51.26
13201	CA	TRP	C	142	-70.212	17.114	13.645	1.00	51.37
13202	CB	TRP	C	142	-69.836	18.493	14.207	1.00	51.31
13203	CG	TRP	C	142	-70.943	19.180	14.912	1.00	50.43
13204	CD1	TRP	C	142	-71.326	18.997	16.205	1.00	49.84
13205	NE1	TRP	C	142	-72.393	19.809	16.502	1.00	49.98
13206	CE2	TRP	C	142	-72.717	20.540	15.388	1.00	50.22
13207	CD2	TRP	C	142	-71.823	20.165	14.367	1.00	50.21
13208	CE3	TRP	C	142	-71.950	20.771	13.112	1.00	51.31
13209	CZ3	TRP	C	142	-72.947	21.722	12.920	1.00	51.29
13210	CH2	TRP	C	142	-73.819	22.069	13.956	1.00	51.73
13211	CZ2	TRP	C	142	-73.722	21.490	15.196	1.00	50.71
13212	C	TRP	C	142	-71.474	17.190	12.798	1.00	51.49
13213	O	TRP	C	142	-71.536	17.924	11.810	1.00	51.84
13214	N	ASN	C	143	-72.488	16.433	13.200	1.00	51.64
13215	CA	ASN	C	143	-73.736	16.351	12.453	1.00	51.37
13216	CB	ASN	C	143	-74.291	17.737	12.150	1.00	51.75
13217	CG	ASN	C	143	-75.197	18.258	13.241	1.00	52.46
13218	OD1	ASN	C	143	-75.867	19.277	13.062	1.00	53.41
13219	ND2	ASN	C	143	-75.230	17.565	14.376	1.00	53.62
13220	C	ASN	C	143	-73.513	15.575	11.167	1.00	51.06
13221	O	ASN	C	143	-74.200	15.785	10.172	1.00	50.49
13222	N	ASN	C	144	-72.523	14.691	11.209	1.00	51.08
13223	CA	ASN	C	144	-72.202	13.797	10.101	1.00	51.15
13224	CB	ASN	C	144	-73.462	13.126	9.555	1.00	50.84
13225	CG	ASN	C	144	-73.999	12.047	10.484	1.00	50.29
13226	OD1	ASN	C	144	-74.584	11.063	10.036	1.00	50.27
13227	ND2	ASN	C	144	-73.805	12.230	11.778	1.00	48.07
13228	C	ASN	C	144	-71.404	14.447	8.973	1.00	51.59
13229	O	ASN	C	144	-71.328	13.904	7.866	1.00	51.44
13230	N	ASP	C	145	-70.813	15.604	9.260	1.00	51.81
13231	CA	ASP	C	145	-69.983	16.296	8.283	1.00	52.26
13232	CB	ASP	C	145	-70.640	17.601	7.815	1.00	52.15
13233	CG	ASP	C	145	-71.764	17.362	6.811	1.00	50.96
13234	OD1	ASP	C	145	-72.810	18.029	6.926	1.00	50.59
13235	OD2	ASP	C	145	-71.699	16.526	5.884	1.00	48.94
13236	C	ASP	C	145	-68.578	16.547	8.819	1.00	52.86
13237	O	ASP	C	145	-68.357	16.618	10.023	1.00	52.66
13238	N	ILE	C	146	-67.622	16.666	7.908	1.00	53.67
13239	CA	ILE	C	146	-66.237	16.889	8.285	1.00	53.87
13240	CB	ILE	C	146	-65.327	16.195	7.286	1.00	53.95
13241	CG1	ILE	C	146	-65.826	14.767	7.057	1.00	53.11
13242	CD1	ILE	C	146	-64.983	13.990	6.120	1.00	52.39
13243	CG2	ILE	C	146	-63.868	16.250	7.748	1.00	53.60
13244	C	ILE	C	146	-65.895	18.368	8.334	1.00	54.42
13245	O	ILE	C	146	-66.372	19.153	7.528	1.00	54.37
13246	N	TYR	C	147	-65.086	18.742	9.311	1.00	55.14
13247	CA	TYR	C	147	-64.598	20.102	9.414	1.00	55.88
13248	CB	TYR	C	147	-65.287	20.852	10.551	1.00	55.87
13249	CG	TYR	C	147	-66.776	21.024	10.347	1.00	55.84
13250	CD1	TYR	C	147	-67.291	22.200	9.819	1.00	54.69



FIGURE 3 IZ

A	B	C	D	E	F	G	H	I	J
13251	CE1	TYR	C	147	-68.644	22.366	9.628	1.00	54.24
13252	CZ	TYR	C	147	-69.512	21.345	9.957	1.00	55.37
13253	OH	TYR	C	147	-70.872	21.513	9.764	1.00	55.23
13254	CE2	TYR	C	147	-69.028	20.162	10.489	1.00	55.28
13255	CD2	TYR	C	147	-67.667	20.007	10.679	1.00	55.21
13256	C	TYR	C	147	-63.093	20.057	9.630	1.00	56.38
13257	O	TYR	C	147	-62.556	19.073	10.150	1.00	56.37
13258	N	VAL	C	148	-62.406	21.106	9.192	1.00	57.10
13259	CA	VAL	C	148	-60.964	21.201	9.402	1.00	57.64
13260	CB	VAL	C	148	-60.166	21.037	8.104	1.00	57.56
13261	CG1	VAL	C	148	-58.687	21.228	8.389	1.00	57.70
13262	CG2	VAL	C	148	-60.425	19.678	7.478	1.00	57.68
13263	C	VAL	C	148	-60.570	22.533	10.033	1.00	57.92
13264	O	VAL	C	148	-60.899	23.598	9.516	1.00	58.05
13265	N	LYS	C	149	-59.891	22.464	11.170	1.00	58.25
13266	CA	LYS	C	149	-59.353	23.654	11.792	1.00	58.62
13267	CB	LYS	C	149	-59.876	23.826	13.220	1.00	58.69
13268	CG	LYS	C	149	-61.085	24.741	13.265	1.00	58.34
13269	CD	LYS	C	149	-61.901	24.600	14.520	1.00	59.13
13270	CE	LYS	C	149	-63.294	25.159	14.274	1.00	60.03
13271	NZ	LYS	C	149	-64.079	25.410	15.511	1.00	60.87
13272	C	LYS	C	149	-57.832	23.592	11.721	1.00	58.96
13273	O	LYS	C	149	-57.202	22.747	12.369	1.00	58.81
13274	N	ILE	C	150	-57.257	24.462	10.887	1.00	59.42
13275	CA	ILE	C	150	-55.812	24.515	10.680	1.00	59.81
13276	CB	ILE	C	150	-55.467	25.272	9.379	1.00	60.08
13277	CG1	ILE	C	150	-56.066	24.556	8.159	1.00	59.91
13278	CD1	ILE	C	150	-55.435	23.217	7.867	1.00	59.08
13279	CG2	ILE	C	150	-53.949	25.425	9.212	1.00	60.27
13280	C	ILE	C	150	-55.180	25.174	11.893	1.00	60.09
13281	O	ILE	C	150	-54.076	24.829	12.301	1.00	60.07
13282	N	GLU	C	151	-55.894	26.127	12.473	1.00	60.72
13283	CA	GLU	C	151	-55.458	26.743	13.719	1.00	61.36
13284	CB	GLU	C	151	-54.933	28.171	13.509	1.00	61.42
13285	CG	GLU	C	151	-53.838	28.331	12.458	1.00	61.94
13286	CD	GLU	C	151	-52.553	27.587	12.785	1.00	62.45
13287	OE1	GLU	C	151	-52.356	27.199	13.953	1.00	62.15
13288	OE2	GLU	C	151	-51.733	27.386	11.860	1.00	63.16
13289	C	GLU	C	151	-56.628	26.732	14.703	1.00	61.64
13290	O	GLU	C	151	-57.732	27.179	14.380	1.00	61.23
13291	N	PRO	C	152	-56.381	26.193	15.892	1.00	62.04
13292	CA	PRO	C	152	-57.387	26.113	16.954	1.00	62.45
13293	CB	PRO	C	152	-56.541	25.854	18.196	1.00	62.32
13294	CG	PRO	C	152	-55.401	25.044	17.678	1.00	62.48
13295	CD	PRO	C	152	-55.102	25.586	16.300	1.00	62.14
13296	C	PRO	C	152	-58.233	27.378	17.136	1.00	62.92
13297	O	PRO	C	152	-59.417	27.267	17.461	1.00	62.99
13298	N	ASN	C	153	-57.654	28.558	16.945	1.00	63.19
13299	CA	ASN	C	153	-58.444	29.781	17.090	1.00	63.80
13300	CB	ASN	C	153	-57.665	30.896	17.815	1.00	63.84
13301	CG	ASN	C	153	-56.339	31.231	17.150	1.00	64.51

FIGURE 3 JA

A	B	C	D	E	F	G	H	I	J
13302	OD1	ASN	C	153	-55.695	32.218	17.507	1.00	64.68
13303	ND2	ASN	C	153	-55.921	30.409	16.188	1.00	65.33
13304	C	ASN	C	153	-59.087	30.284	15.790	1.00	63.87
13305	O	ASN	C	153	-59.859	31.238	15.806	1.00	64.01
13306	N	LEU	C	154	-58.790	29.616	14.679	1.00	63.96
13307	CA	LEU	C	154	-59.337	29.993	13.376	1.00	64.19
13308	CB	LEU	C	154	-58.359	29.605	12.259	1.00	64.36
13309	CG	LEU	C	154	-57.491	30.702	11.634	1.00	64.94
13310	CD1	LEU	C	154	-57.018	31.723	12.664	1.00	66.40
13311	CD2	LEU	C	154	-56.308	30.091	10.902	1.00	66.34
13312	C	LEU	C	154	-60.701	29.373	13.075	1.00	64.11
13313	O	LEU	C	154	-61.042	28.318	13.606	1.00	63.97
13314	N	PRO	C	155	-61.485	30.052	12.238	1.00	64.06
13315	CA	PRO	C	155	-62.754	29.510	11.750	1.00	64.03
13316	CB	PRO	C	155	-63.240	30.578	10.765	1.00	64.17
13317	CG	PRO	C	155	-62.588	31.833	11.221	1.00	64.13
13318	CD	PRO	C	155	-61.239	31.415	11.738	1.00	64.18
13319	C	PRO	C	155	-62.516	28.199	11.016	1.00	63.94
13320	O	PRO	C	155	-61.470	28.006	10.389	1.00	63.61
13321	N	SER	C	156	-63.501	27.311	11.084	1.00	63.72
13322	CA	SER	C	156	-63.365	25.985	10.508	1.00	63.40
13323	CB	SER	C	156	-64.247	25.008	11.278	1.00	63.45
13324	OG	SER	C	156	-63.555	23.796	11.492	1.00	64.22
13325	C	SER	C	156	-63.694	25.920	9.018	1.00	62.88
13326	O	SER	C	156	-64.485	26.711	8.512	1.00	62.47
13327	N	TYR	C	157	-63.065	24.970	8.330	1.00	62.46
13328	CA	TYR	C	157	-63.328	24.714	6.918	1.00	62.31
13329	CB	TYR	C	157	-62.032	24.383	6.172	1.00	62.70
13330	CG	TYR	C	157	-61.109	25.556	5.981	1.00	63.80
13331	CD1	TYR	C	157	-61.433	26.574	5.099	1.00	64.98
13332	CE1	TYR	C	157	-60.595	27.657	4.919	1.00	66.09
13333	CZ	TYR	C	157	-59.418	27.732	5.627	1.00	66.66
13334	OH	TYR	C	157	-58.588	28.810	5.444	1.00	67.19
13335	CE2	TYR	C	157	-59.069	26.729	6.512	1.00	66.54
13336	CD2	TYR	C	157	-59.916	25.649	6.685	1.00	64.83
13337	C	TYR	C	157	-64.270	23.522	6.807	1.00	61.61
13338	O	TYR	C	157	-63.955	22.428	7.271	1.00	61.25
13339	N	ARG	C	158	-65.419	23.726	6.181	1.00	60.98
13340	CA	ARG	C	158	-66.393	22.647	6.057	1.00	60.38
13341	CB	ARG	C	158	-67.811	23.194	6.220	1.00	60.32
13342	CG	ARG	C	158	-68.887	22.148	6.067	1.00	60.13
13343	CD	ARG	C	158	-70.289	22.689	6.231	1.00	60.55
13344	NE	ARG	C	158	-71.293	21.657	6.004	1.00	59.93
13345	CZ	ARG	C	158	-72.528	21.705	6.481	1.00	60.15
13346	NH1	ARG	C	158	-73.379	20.719	6.216	1.00	59.78
13347	NH2	ARG	C	158	-72.918	22.741	7.218	1.00	58.83
13348	C	ARG	C	158	-66.266	21.865	4.749	1.00	59.75
13349	O	ARG	C	158	-66.643	22.354	3.693	1.00	59.93
13350	N	ILE	C	159	-65.749	20.643	4.838	1.00	59.20
13351	CA	ILE	C	159	-65.558	19.775	3.671	1.00	58.45
13352	CB	ILE	C	159	-64.607	18.600	4.017	1.00	58.57

FIGURE 3 JB

A	B	C	D	E	F	G	H	I	J
13353	CG1	ILE	C	159	-63.287	19.122	4.592	1.00	58.50
13354	CD1	ILE	C	159	-63.306	19.304	6.083	1.00	58.48
13355	CG2	ILE	C	159	-64.353	17.719	2.800	1.00	58.49
13356	C	ILE	C	159	-66.866	19.241	3.083	1.00	57.81
13357	O	ILE	C	159	-67.053	19.271	1.866	1.00	58.16
13358	N	THR	C	160	-67.771	18.759	3.936	1.00	57.01
13359	CA	THR	C	160	-69.032	18.178	3.450	1.00	56.14
13360	CB	THR	C	160	-69.153	16.680	3.827	1.00	56.00
13361	OG1	THR	C	160	-69.057	16.522	5.250	1.00	56.18
13362	CG2	THR	C	160	-67.977	15.890	3.296	1.00	55.80
13363	C	THR	C	160	-70.298	18.921	3.886	1.00	55.68
13364	O	THR	C	160	-70.305	19.655	4.873	1.00	55.61
13365	N	TRP	C	161	-71.375	18.694	3.142	1.00	54.98
13366	CA	TRP	C	161	-72.648	19.349	3.390	1.00	54.68
13367	CB	TRP	C	161	-72.805	20.553	2.461	1.00	55.08
13368	CG	TRP	C	161	-71.580	21.354	2.378	1.00	55.56
13369	CD1	TRP	C	161	-70.367	20.951	1.897	1.00	55.52
13370	NE1	TRP	C	161	-69.459	21.977	2.003	1.00	55.96
13371	CE2	TRP	C	161	-70.081	23.064	2.562	1.00	56.02
13372	CD2	TRP	C	161	-71.418	22.701	2.811	1.00	55.85
13373	CE3	TRP	C	161	-72.274	23.648	3.389	1.00	56.89
13374	CZ3	TRP	C	161	-71.779	24.904	3.690	1.00	57.47
13375	CH2	TRP	C	161	-70.448	25.234	3.428	1.00	57.78
13376	CZ2	TRP	C	161	-69.582	24.329	2.869	1.00	57.05
13377	C	TRP	C	161	-73.802	18.401	3.137	1.00	53.98
13378	O	TRP	C	161	-74.955	18.812	3.138	1.00	53.75
13379	N	THR	C	162	-73.489	17.135	2.903	1.00	53.53
13380	CA	THR	C	162	-74.520	16.139	2.644	1.00	52.88
13381	CB	THR	C	162	-74.123	15.294	1.420	1.00	53.01
13382	OG1	THR	C	162	-72.734	14.954	1.507	1.00	52.69
13383	CG2	THR	C	162	-74.176	16.134	0.155	1.00	53.59
13384	C	THR	C	162	-74.789	15.248	3.869	1.00	52.40
13385	O	THR	C	162	-75.542	14.287	3.792	1.00	52.03
13386	N	GLY	C	163	-74.169	15.575	5.000	1.00	52.20
13387	CA	GLY	C	163	-74.321	14.780	6.213	1.00	51.36
13388	C	GLY	C	163	-75.720	14.812	6.799	1.00	50.71
13389	O	GLY	C	163	-76.276	15.893	7.019	1.00	50.76
13390	N	LYS	C	164	-76.288	13.632	7.051	1.00	49.94
13391	CA	LYS	C	164	-77.642	13.528	7.599	1.00	49.15
13392	CB	LYS	C	164	-78.682	13.626	6.478	1.00	49.20
13393	CG	LYS	C	164	-80.096	13.243	6.890	1.00	50.16
13394	CD	LYS	C	164	-81.170	14.082	6.179	1.00	52.16
13395	CE	LYS	C	164	-81.338	15.453	6.868	1.00	54.24
13396	NZ	LYS	C	164	-82.688	16.088	6.672	1.00	54.51
13397	C	LYS	C	164	-77.888	12.290	8.495	1.00	48.51
13398	O	LYS	C	164	-77.695	11.140	8.082	1.00	47.95
13399	N	GLU	C	165	-78.326	12.559	9.723	1.00	47.71
13400	CA	GLU	C	165	-78.614	11.536	10.727	1.00	47.19
13401	CB	GLU	C	165	-79.580	12.099	11.776	1.00	47.47
13402	CG	GLU	C	165	-79.630	11.332	13.092	1.00	49.01
13403	CD	GLU	C	165	-79.997	12.232	14.260	1.00	51.41

FIGURE 3 JC

A	B	C	D	E	F	G	H	I	J
13404	OE1	GLU	C	165	-81.175	12.615	14.381	1.00	52.87
13405	OE2	GLU	C	165	-79.102	12.589	15.048	1.00	53.74
13406	C	GLU	C	165	-79.180	10.243	10.155	1.00	46.25
13407	O	GLU	C	165	-80.220	10.249	9.504	1.00	45.87
13408	N	ASN	C	166	-78.481	9.141	10.423	1.00	45.49
13409	CA	ASN	C	166	-78.891	7.800	9.999	1.00	45.03
13410	CB	ASN	C	166	-80.239	7.395	10.612	1.00	45.31
13411	CG	ASN	C	166	-80.312	7.640	12.103	1.00	45.21
13412	OD1	ASN	C	166	-79.403	7.285	12.858	1.00	44.24
13413	ND2	ASN	C	166	-81.409	8.251	12.538	1.00	45.18
13414	C	ASN	C	166	-78.982	7.583	8.501	1.00	44.76
13415	O	ASN	C	166	-79.366	6.503	8.062	1.00	44.58
13416	N	ILE	C	167	-78.643	8.596	7.710	1.00	44.44
13417	CA	ILE	C	167	-78.720	8.461	6.262	1.00	43.81
13418	CB	ILE	C	167	-79.562	9.586	5.680	1.00	43.95
13419	CG1	ILE	C	167	-81.010	9.436	6.156	1.00	43.48
13420	CD1	ILE	C	167	-81.642	8.087	5.791	1.00	43.86
13421	CG2	ILE	C	167	-79.482	9.575	4.163	1.00	42.86
13422	C	ILE	C	167	-77.349	8.393	5.590	1.00	43.65
13423	O	ILE	C	167	-77.022	7.423	4.909	1.00	43.28
13424	N	ILE	C	168	-76.552	9.438	5.756	1.00	43.61
13425	CA	ILE	C	168	-75.218	9.420	5.181	1.00	43.23
13426	CB	ILE	C	168	-75.126	10.230	3.843	1.00	43.69
13427	CG1	ILE	C	168	-74.691	11.666	4.102	1.00	42.79
13428	CD1	ILE	C	168	-73.217	11.872	3.887	1.00	42.78
13429	CG2	ILE	C	168	-76.413	10.127	2.985	1.00	42.05
13430	C	ILE	C	168	-74.177	9.881	6.197	1.00	43.21
13431	O	ILE	C	168	-74.377	10.860	6.930	1.00	42.93
13432	N	TYR	C	169	-73.065	9.156	6.236	1.00	42.75
13433	CA	TYR	C	169	-72.011	9.450	7.180	1.00	42.82
13434	CB	TYR	C	169	-71.712	8.229	8.064	1.00	43.22
13435	CG	TYR	C	169	-72.924	7.570	8.671	1.00	44.10
13436	CD1	TYR	C	169	-73.862	6.936	7.870	1.00	45.21
13437	CB1	TYR	C	169	-74.973	6.331	8.416	1.00	46.11
13438	CZ	TYR	C	169	-75.157	6.339	9.788	1.00	46.33
13439	OH	TYR	C	169	-76.267	5.719	10.311	1.00	46.34
13440	CE2	TYR	C	169	-74.237	6.959	10.615	1.00	45.49
13441	CD2	TYR	C	169	-73.125	7.570	10.051	1.00	45.20
13442	C	TYR	C	169	-70.724	9.893	6.491	1.00	42.51
13443	O	TYR	C	169	-70.168	9.170	5.659	1.00	41.77
13444	N	ASN	C	170	-70.250	11.077	6.872	1.00	42.19
13445	CA	ASN	C	170	-68.988	11.592	6.377	1.00	42.04
13446	CB	ASN	C	170	-69.160	13.017	5.853	1.00	41.71
13447	CG	ASN	C	170	-70.039	13.079	4.609	1.00	42.53
13448	OD1	ASN	C	170	-69.808	12.350	3.646	1.00	42.46
13449	ND2	ASN	C	170	-71.059	13.941	4.631	1.00	41.76
13450	C	ASN	C	170	-67.935	11.547	7.482	1.00	42.00
13451	O	ASN	C	170	-68.083	12.198	8.515	1.00	42.30
13452	N	GLY	C	171	-66.886	10.759	7.273	1.00	41.64
13453	CA	GLY	C	171	-65.807	10.670	8.236	1.00	41.13
13454	C	GLY	C	171	-66.058	9.727	9.399	1.00	40.95

FIGURE 3 JD

A	B	C	D	E	F	G	H	I	J
13455	O	GLY	C	171	-65.154	9.461	10.193	1.00	40.62
13456	N	ILE	C	172	-67.286	9.228	9.516	1.00	40.57
13457	CA	ILE	C	172	-67.624	8.289	10.578	1.00	39.79
13458	CB	ILE	C	172	-68.451	8.973	11.661	1.00	39.90
13459	CG1	ILE	C	172	-69.562	9.796	11.022	1.00	39.26
13460	CD1	ILE	C	172	-70.532	10.354	12.003	1.00	38.29
13461	CG2	ILE	C	172	-67.563	9.856	12.540	1.00	39.02
13462	C	ILE	C	172	-68.404	7.136	9.996	1.00	39.77
13463	O	ILE	C	172	-69.107	7.300	9.002	1.00	39.81
13464	N	THR	C	173	-68.276	5.971	10.619	1.00	39.50
13465	CA	THR	C	173	-68.964	4.773	10.169	1.00	39.42
13466	CB	THR	C	173	-68.200	3.524	10.633	1.00	39.64
13467	OG1	THR	C	173	-67.854	3.665	12.014	1.00	40.82
13468	CG2	THR	C	173	-66.831	3.421	9.955	1.00	39.55
13469	C	THR	C	173	-70.394	4.703	10.709	1.00	39.41
13470	O	THR	C	173	-70.742	5.398	11.666	1.00	39.69
13471	N	ASP	C	174	-71.218	3.875	10.068	1.00	39.14
13472	CA	ASP	C	174	-72.564	3.584	10.531	1.00	39.00
13473	CB	ASP	C	174	-73.484	3.230	9.355	1.00	39.09
13474	CG	ASP	C	174	-73.069	1.954	8.662	1.00	38.75
13475	OD1	ASP	C	174	-73.925	1.261	8.079	1.00	39.17
13476	OD2	ASP	C	174	-71.899	1.549	8.661	1.00	39.00
13477	C	ASP	C	174	-72.423	2.377	11.458	1.00	38.90
13478	O	ASP	C	174	-71.294	1.956	11.755	1.00	38.94
13479	N	TRP	C	175	-73.548	1.788	11.874	1.00	38.32
13480	CA	TRP	C	175	-73.495	0.669	12.826	1.00	37.39
13481	CB	TRP	C	175	-74.881	0.130	13.249	1.00	36.66
13482	CG	TRP	C	175	-74.755	-0.781	14.444	1.00	34.76
13483	CD1	TRP	C	175	-74.894	-0.437	15.767	1.00	33.61
13484	NE1	TRP	C	175	-74.656	-1.529	16.570	1.00	32.83
13485	CE2	TRP	C	175	-74.338	-2.603	15.781	1.00	33.34
13486	CD2	TRP	C	175	-74.393	-2.168	14.435	1.00	33.17
13487	CE3	TRP	C	175	-74.102	-3.089	13.426	1.00	33.10
13488	CZ3	TRP	C	175	-73.784	-4.403	13.778	1.00	35.95
13489	CH2	TRP	C	175	-73.749	-4.808	15.131	1.00	33.36
13490	CZ2	TRP	C	175	-74.021	-3.923	16.139	1.00	33.92
13491	C	TRP	C	175	-72.602	-0.481	12.405	1.00	37.52
13492	O	TRP	C	175	-71.697	-0.811	13.137	1.00	37.46
13493	N	VAL	C	176	-72.860	-1.120	11.265	1.00	38.02
13494	CA	VAL	C	176	-72.031	-2.269	10.873	1.00	38.72
13495	CB	VAL	C	176	-72.546	-3.046	9.649	1.00	38.61
13496	CG1	VAL	C	176	-72.889	-2.113	8.498	1.00	38.51
13497	CG2	VAL	C	176	-73.685	-3.927	10.027	1.00	40.15
13498	C	VAL	C	176	-70.568	-1.972	10.591	1.00	38.82
13499	O	VAL	C	176	-69.719	-2.795	10.886	1.00	38.67
13500	N	TYR	C	177	-70.277	-0.833	9.979	1.00	39.42
13501	CA	TYR	C	177	-68.887	-0.495	9.698	1.00	40.38
13502	CB	TYR	C	177	-68.762	0.747	8.802	1.00	40.37
13503	CG	TYR	C	177	-68.581	0.387	7.356	1.00	42.38
13504	CD1	TYR	C	177	-69.664	0.341	6.491	1.00	42.20
13505	CE1	TYR	C	177	-69.499	-0.006	5.164	1.00	43.28

FIGURE 3 JE

A	B	C	D	E	F	G	H	I	J
13506	CZ	TYR	C	177	-68.245	-0.330	4.690	1.00	44.13
13507	OH	TYR	C	177	-68.083	-0.679	3.366	1.00	44.97
13508	CE2	TYR	C	177	-67.152	-0.300	5.528	1.00	44.63
13509	CD2	TYR	C	177	-67.323	0.054	6.857	1.00	43.88
13510	C	TYR	C	177	-68.126	-0.296	10.991	1.00	40.39
13511	O	TYR	C	177	-66.966	-0.692	11.092	1.00	40.42
13512	N	GLU	C	178	-68.784	0.323	11.973	1.00	40.72
13513	CA	GLU	C	178	-68.159	0.550	13.264	1.00	40.73
13514	CB	GLU	C	178	-69.032	1.401	14.184	1.00	40.68
13515	CG	GLU	C	178	-68.530	1.344	15.622	1.00	41.20
13516	CD	GLU	C	178	-69.296	2.227	16.588	1.00	42.64
13517	OE1	GLU	C	178	-70.257	2.912	16.159	1.00	43.45
13518	OE2	GLU	C	178	-68.924	2.237	17.785	1.00	41.11
13519	C	GLU	C	178	-67.864	-0.749	13.985	1.00	41.01
13520	O	GLU	C	178	-66.825	-0.888	14.632	1.00	41.00
13521	N	GLU	C	179	-68.783	-1.701	13.879	1.00	40.73
13522	CA	GLU	C	179	-68.669	-2.926	14.658	1.00	40.70
13523	CB	GLU	C	179	-70.059	-3.363	15.140	1.00	40.46
13524	CG	GLU	C	179	-70.098	-4.669	15.914	1.00	40.01
13525	CD	GLU	C	179	-69.334	-4.596	17.216	1.00	39.94
13526	OE1	GLU	C	179	-68.845	-5.642	17.661	1.00	40.92
13527	OE2	GLU	C	179	-69.212	-3.498	17.796	1.00	40.49
13528	C	GLU	C	179	-67.987	-4.086	13.948	1.00	40.96
13529	O	GLU	C	179	-67.259	-4.848	14.577	1.00	40.57
13530	N	GLU	C	180	-68.210	-4.226	12.646	1.00	41.08
13531	CA	GLU	C	180	-67.698	-5.399	11.957	1.00	41.75
13532	CB	GLU	C	180	-68.853	-6.198	11.366	1.00	41.10
13533	CG	GLU	C	180	-69.966	-6.475	12.351	1.00	41.62
13534	CD	GLU	C	180	-69.577	-7.514	13.391	1.00	41.25
13535	OE1	GLU	C	180	-68.369	-7.684	13.650	1.00	41.50
13536	OE2	GLU	C	180	-70.482	-8.167	13.937	1.00	41.06
13537	C	GLU	C	180	-66.619	-5.186	10.895	1.00	42.58
13538	O	GLU	C	180	-65.956	-6.142	10.476	1.00	43.00
13539	N	VAL	C	181	-66.435	-3.958	10.445	1.00	43.43
13540	CA	VAL	C	181	-65.456	-3.729	9.398	1.00	43.85
13541	CB	VAL	C	181	-66.074	-3.018	8.188	1.00	44.18
13542	CG1	VAL	C	181	-64.996	-2.678	7.174	1.00	44.20
13543	CG2	VAL	C	181	-67.141	-3.893	7.557	1.00	43.81
13544	C	VAL	C	181	-64.269	-2.943	9.898	1.00	44.14
13545	O	VAL	C	181	-63.135	-3.408	9.816	1.00	44.39
13546	N	PHE	C	182	-64.519	-1.755	10.433	1.00	44.37
13547	CA	PHE	C	182	-63.422	-0.908	10.887	1.00	44.60
13548	CB	PHE	C	182	-63.721	0.567	10.595	1.00	44.50
13549	CG	PHE	C	182	-63.745	0.919	9.124	1.00	45.31
13550	CD1	PHE	C	182	-63.304	0.026	8.165	1.00	45.26
13551	CE1	PHE	C	182	-63.321	0.356	6.829	1.00	45.23
13552	CZ	PHE	C	182	-63.783	1.585	6.421	1.00	45.77
13553	CE2	PHE	C	182	-64.227	2.489	7.358	1.00	45.85
13554	CD2	PHE	C	182	-64.200	2.157	8.707	1.00	45.64
13555	C	PHE	C	182	-63.093	-1.057	12.379	1.00	45.09
13556	O	PHE	C	182	-62.014	-0.636	12.820	1.00	45.26

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 JF**

A	B	C	D	E	F	G	H	I	J
13557	N	SER	C	183	-64.010	-1.629	13.162	1.00	44.85
13558	CA	SER	C	183	-63.802	-1.710	14.602	1.00	44.77
13559	CB	SER	C	183	-62.708	-2.716	14.966	1.00	44.65
13560	OG	SER	C	183	-63.239	-4.027	15.116	1.00	44.40
13561	C	SER	C	183	-63.430	-0.338	15.129	1.00	44.82
13562	O	SER	C	183	-62.626	-0.206	16.043	1.00	45.17
13563	N	ALA	C	184	-64.012	0.690	14.541	1.00	45.06
13564	CA	ALA	C	184	-63.747	2.049	14.981	1.00	45.29
13565	CB	ALA	C	184	-62.417	2.538	14.442	1.00	45.24
13566	C	ALA	C	184	-64.866	2.912	14.458	1.00	45.50
13567	O	ALA	C	184	-65.577	2.504	13.544	1.00	44.92
13568	N	TYR	C	185	-65.025	4.095	15.050	1.00	45.78
13569	CA	TYR	C	185	-66.040	5.035	14.623	1.00	45.98
13570	CB	TYR	C	185	-66.378	5.986	15.762	1.00	45.75
13571	CG	TYR	C	185	-67.643	6.790	15.544	1.00	44.28
13572	CD1	TYR	C	185	-67.828	8.011	16.175	1.00	43.24
13573	CE1	TYR	C	185	-68.987	8.731	15.997	1.00	42.97
13574	CZ	TYR	C	185	-69.973	8.234	15.175	1.00	42.29
13575	OH	TYR	C	185	-71.129	8.947	14.990	1.00	43.54
13576	CE2	TYR	C	185	-69.808	7.042	14.532	1.00	42.00
13577	CD2	TYR	C	185	-68.650	6.322	14.718	1.00	42.34
13578	C	TYR	C	185	-65.482	5.853	13.487	1.00	46.74
13579	O	TYR	C	185	-66.169	6.132	12.500	1.00	46.83
13580	N	SER	C	186	-64.220	6.242	13.653	1.00	47.74
13581	CA	SER	C	186	-63.517	7.088	12.700	1.00	48.47
13582	CB	SER	C	186	-62.090	7.356	13.178	1.00	48.70
13583	OG	SER	C	186	-61.384	8.148	12.229	1.00	49.39
13584	C	SER	C	186	-63.458	6.498	11.311	1.00	48.68
13585	O	SER	C	186	-63.246	5.304	11.143	1.00	49.06
13586	N	ALA	C	187	-63.661	7.353	10.323	1.00	49.12
13587	CA	ALA	C	187	-63.509	6.983	8.924	1.00	50.17
13588	CB	ALA	C	187	-64.866	6.728	8.260	1.00	49.98
13589	C	ALA	C	187	-62.778	8.141	8.255	1.00	50.51
13590	O	ALA	C	187	-63.133	8.573	7.164	1.00	50.64
13591	N	LEU	C	188	-61.764	8.644	8.955	1.00	51.24
13592	CA	LEU	C	188	-60.936	9.746	8.491	1.00	51.93
13593	CB	LEU	C	188	-61.135	10.969	9.376	1.00	51.74
13594	CG	LEU	C	188	-62.347	11.804	9.026	1.00	51.76
13595	CD1	LEU	C	188	-62.507	12.930	10.028	1.00	52.13
13596	CD2	LEU	C	188	-62.173	12.337	7.622	1.00	52.08
13597	C	LEU	C	188	-59.482	9.331	8.573	1.00	52.48
13598	O	LEU	C	188	-59.059	8.751	9.570	1.00	52.33
13599	N	TRP	C	189	-58.719	9.639	7.528	1.00	53.20
13600	CA	TRP	C	189	-57.304	9.285	7.481	1.00	53.81
13601	CB	TRP	C	189	-57.094	8.045	6.615	1.00	53.83
13602	CG	TRP	C	189	-57.881	6.857	7.072	1.00	54.47
13603	CD1	TRP	C	189	-57.503	5.930	8.004	1.00	54.57
13604	NE1	TRP	C	189	-58.490	4.986	8.159	1.00	53.87
13605	CE2	TRP	C	189	-59.531	5.292	7.326	1.00	54.72
13606	CD2	TRP	C	189	-59.182	6.468	6.629	1.00	54.66
13607	CE3	TRP	C	189	-60.092	6.988	5.702	1.00	55.32

FIGURE 3 JG

A	B	C	D	E	F	G	H	I	J
13608	CZ3	TRP	C	189	-61.297	6.330	5.504	1.00	54.99
13609	CH2	TRP	C	189	-61.613	5.168	6.213	1.00	54.89
13610	CZ2	TRP	C	189	-60.748	4.634	7.128	1.00	55.32
13611	C	TRP	C	189	-56.453	10.440	6.952	1.00	54.18
13612	O	TRP	C	189	-56.533	10.799	5.775	1.00	53.89
13613	N	TRP	C	190	-55.660	11.031	7.841	1.00	54.56
13614	CA	TRP	C	190	-54.733	12.091	7.479	1.00	54.79
13615	CB	TRP	C	190	-54.220	12.786	8.730	1.00	54.74
13616	CG	TRP	C	190	-55.093	13.804	9.370	1.00	54.58
13617	CD1	TRP	C	190	-55.765	13.672	10.547	1.00	54.42
13618	NE1	TRP	C	190	-56.433	14.834	10.845	1.00	53.90
13619	CE2	TRP	C	190	-56.184	15.752	9.861	1.00	53.77
13620	CD2	TRP	C	190	-55.332	15.139	8.921	1.00	53.97
13621	CE3	TRP	C	190	-54.923	15.879	7.809	1.00	54.28
13622	CZ3	TRP	C	190	-55.374	17.181	7.672	1.00	54.18
13623	CH2	TRP	C	190	-56.215	17.763	8.628	1.00	54.05
13624	CZ2	TRP	C	190	-56.627	17.067	9.729	1.00	53.74
13625	C	TRP	C	190	-53.514	11.461	6.835	1.00	55.15
13626	O	TRP	C	190	-53.066	10.405	7.266	1.00	55.18
13627	N	SER	C	191	-52.961	12.113	5.819	1.00	55.91
13628	CA	SER	C	191	-51.713	11.653	5.221	1.00	56.59
13629	CB	SER	C	191	-51.420	12.415	3.926	1.00	56.56
13630	OG	SER	C	191	-51.541	13.816	4.111	1.00	56.03
13631	C	SER	C	191	-50.593	11.893	6.234	1.00	57.42
13632	O	SER	C	191	-50.714	12.750	7.118	1.00	56.98
13633	N	PRO	C	192	-49.512	11.133	6.110	1.00	58.15
13634	CA	PRO	C	192	-48.376	11.246	7.026	1.00	59.14
13635	CB	PRO	C	192	-47.262	10.537	6.268	1.00	59.27
13636	CG	PRO	C	192	-47.978	9.502	5.455	1.00	58.36
13637	CD	PRO	C	192	-49.300	10.101	5.082	1.00	58.19
13638	C	PRO	C	192	-48.002	12.701	7.273	1.00	60.19
13639	O	PRO	C	192	-47.788	13.104	8.415	1.00	60.18
13640	N	ASN	C	193	-47.952	13.480	6.198	1.00	61.32
13641	CA	ASN	C	193	-47.593	14.889	6.272	1.00	62.17
13642	CB	ASN	C	193	-47.418	15.438	4.862	1.00	62.99
13643	CG	ASN	C	193	-46.484	16.616	4.810	1.00	65.90
13644	OD1	ASN	C	193	-46.803	17.693	5.313	1.00	68.50
13645	ND2	ASN	C	193	-45.318	16.425	4.192	1.00	72.02
13646	C	ASN	C	193	-48.633	15.733	6.972	1.00	61.82
13647	O	ASN	C	193	-48.300	16.679	7.675	1.00	61.97
13648	N	GLY	C	194	-49.901	15.407	6.751	1.00	61.60
13649	CA	GLY	C	194	-50.994	16.172	7.315	1.00	60.80
13650	C	GLY	C	194	-51.556	17.052	6.222	1.00	60.44
13651	O	GLY	C	194	-52.471	17.853	6.434	1.00	60.77
13652	N	THR	C	195	-50.996	16.899	5.032	1.00	59.75
13653	CA	THR	C	195	-51.421	17.694	3.897	1.00	58.98
13654	CB	THR	C	195	-50.386	17.572	2.761	1.00	59.11
13655	OG1	THR	C	195	-49.064	17.669	3.310	1.00	59.07
13656	CG2	THR	C	195	-50.474	18.769	1.825	1.00	59.07
13657	C	THR	C	195	-52.790	17.214	3.434	1.00	58.49
13658	O	THR	C	195	-53.727	18.007	3.310	1.00	58.20



FIGURE 3 JH

A	B	C	D	E	F	G	H	I	J
13659	N	PHE	C	196	-52.900	15.907	3.201	1.00	57.69
13660	CA	PHE	C	196	-54.143	15.308	2.719	1.00	57.12
13661	CB	PHE	C	196	-53.843	14.217	1.691	1.00	57.33
13662	CG	PHE	C	196	-53.296	14.739	0.402	1.00	58.36
13663	CD1	PHE	C	196	-54.017	15.660	-0.347	1.00	59.58
13664	CE1	PHE	C	196	-53.517	16.147	-1.542	1.00	59.97
13665	CZ	PHE	C	196	-52.281	15.722	-1.991	1.00	59.29
13666	CE2	PHE	C	196	-51.550	14.813	-1.249	1.00	58.84
13667	CD2	PHE	C	196	-52.059	14.322	-0.061	1.00	58.77
13668	C	PHE	C	196	-55.040	14.725	3.813	1.00	56.35
13669	O	PHE	C	196	-54.570	14.126	4.787	1.00	56.19
13670	N	LEU	C	197	-56.340	14.908	3.633	1.00	55.17
13671	CA	LEU	C	197	-57.329	14.338	4.528	1.00	54.16
13672	CB	LEU	C	197	-58.172	15.424	5.178	1.00	54.23
13673	CG	LEU	C	197	-59.355	14.877	5.971	1.00	54.29
13674	CD1	LEU	C	197	-60.191	16.016	6.550	1.00	54.27
13675	CD2	LEU	C	197	-58.862	13.939	7.058	1.00	53.50
13676	C	LEU	C	197	-58.229	13.417	3.729	1.00	53.33
13677	O	LEU	C	197	-58.955	13.865	2.844	1.00	52.98
13678	N	ALA	C	198	-58.169	12.131	4.044	1.00	52.27
13679	CA	ALA	C	198	-58.999	11.133	3.385	1.00	51.25
13680	CB	ALA	C	198	-58.167	9.921	3.006	1.00	51.09
13681	C	ALA	C	198	-60.143	10.707	4.296	1.00	50.59
13682	O	ALA	C	198	-59.993	10.636	5.513	1.00	50.77
13683	N	TYR	C	199	-61.287	10.408	3.697	1.00	49.68
13684	CA	TYR	C	199	-62.434	9.951	4.450	1.00	48.67
13685	CB	TYR	C	199	-63.223	11.136	4.986	1.00	48.41
13686	CG	TYR	C	199	-63.804	12.031	3.915	1.00	48.64
13687	CD1	TYR	C	199	-65.078	11.804	3.410	1.00	48.03
13688	CE1	TYR	C	199	-65.617	12.625	2.436	1.00	48.60
13689	CZ	TYR	C	199	-64.884	13.692	1.957	1.00	48.61
13690	OH	TYR	C	199	-65.418	14.514	0.990	1.00	49.11
13691	CE2	TYR	C	199	-63.618	13.948	2.445	1.00	47.99
13692	CD2	TYR	C	199	-63.083	13.117	3.414	1.00	48.38
13693	C	TYR	C	199	-63.347	9.104	3.586	1.00	48.19
13694	O	TYR	C	199	-63.399	9.266	2.366	1.00	47.72
13695	N	ALA	C	200	-64.072	8.200	4.233	1.00	47.53
13696	CA	ALA	C	200	-65.050	7.391	3.528	1.00	46.94
13697	CB	ALA	C	200	-65.052	5.972	4.064	1.00	46.49
13698	C	ALA	C	200	-66.412	8.041	3.713	1.00	46.41
13699	O	ALA	C	200	-66.598	8.876	4.594	1.00	46.78
13700	N	GLN	C	201	-67.356	7.685	2.862	1.00	45.99
13701	CA	GLN	C	201	-68.718	8.167	3.005	1.00	45.83
13702	CB	GLN	C	201	-69.100	9.126	1.879	1.00	46.18
13703	CG	GLN	C	201	-70.533	9.627	1.991	1.00	47.72
13704	CD	GLN	C	201	-70.782	10.903	1.214	1.00	49.96
13705	OE1	GLN	C	201	-71.164	10.859	0.048	1.00	50.58
13706	NE2	GLN	C	201	-70.579	12.042	1.861	1.00	51.42
13707	C	GLN	C	201	-69.640	6.958	3.015	1.00	45.21
13708	O	GLN	C	201	-69.473	6.025	2.220	1.00	45.15
13709	N	PHE	C	202	-70.595	6.946	3.936	1.00	44.23

FIGURE 3 JI

A	B	C	D	E	F	G	H	I	J
13710	CA	PHE	C	202	-71.488	5.800	4.021	1.00	43.33
13711	CB	PHE	C	202	-71.336	5.064	5.352	1.00	42.94
13712	CG	PHE	C	202	-69.931	4.660	5.658	1.00	41.85
13713	CD1	PHE	C	202	-69.400	3.496	5.127	1.00	40.26
13714	CE1	PHE	C	202	-68.094	3.117	5.404	1.00	38.51
13715	CZ	PHE	C	202	-67.306	3.906	6.219	1.00	39.69
13716	CE2	PHE	C	202	-67.823	5.076	6.756	1.00	40.28
13717	CD2	PHE	C	202	-69.132	5.446	6.480	1.00	40.55
13718	C	PHE	C	202	-72.915	6.226	3.807	1.00	43.20
13719	O	PHE	C	202	-73.340	7.277	4.287	1.00	43.16
13720	N	ASN	C	203	-73.650	5.406	3.072	1.00	42.90
13721	CA	ASN	C	203	-75.030	5.709	2.782	1.00	43.29
13722	CB	ASN	C	203	-75.214	5.928	1.292	1.00	43.65
13723	CG	ASN	C	203	-76.412	6.778	0.984	1.00	44.58
13724	OD1	ASN	C	203	-77.425	6.734	1.686	1.00	43.23
13725	ND2	ASN	C	203	-76.298	7.588	-0.059	1.00	47.95
13726	C	ASN	C	203	-75.914	4.578	3.224	1.00	43.26
13727	O	ASN	C	203	-75.774	3.463	2.743	1.00	43.22
13728	N	ASP	C	204	-76.847	4.876	4.119	1.00	43.47
13729	CA	ASP	C	204	-77.716	3.852	4.694	1.00	43.66
13730	CB	ASP	C	204	-77.613	3.891	6.216	1.00	43.84
13731	CG	ASP	C	204	-76.289	3.374	6.707	1.00	44.94
13732	OD1	ASP	C	204	-75.256	3.827	6.172	1.00	45.47
13733	OD2	ASP	C	204	-76.182	2.503	7.598	1.00	46.16
13734	C	ASP	C	204	-79.164	4.018	4.301	1.00	43.16
13735	O	ASP	C	204	-80.031	3.315	4.814	1.00	43.63
13736	N	THR	C	205	-79.415	4.947	3.391	1.00	42.34
13737	CA	THR	C	205	-80.767	5.257	2.933	1.00	42.11
13738	CB	THR	C	205	-80.713	5.917	1.544	1.00	42.01
13739	OG1	THR	C	205	-80.207	7.253	1.668	1.00	42.98
13740	CG2	THR	C	205	-82.117	6.131	1.002	1.00	41.81
13741	C	THR	C	205	-81.734	4.072	2.887	1.00	41.53
13742	O	THR	C	205	-82.896	4.187	3.303	1.00	41.51
13743	N	GLU	C	206	-81.260	2.939	2.388	1.00	40.50
13744	CA	GLU	C	206	-82.146	1.797	2.234	1.00	40.04
13745	CB	GLU	C	206	-82.134	1.324	0.774	1.00	40.07
13746	CG	GLU	C	206	-82.438	2.480	-0.172	1.00	41.65
13747	CD	GLU	C	206	-82.268	2.161	-1.646	1.00	44.80
13748	OE1	GLU	C	206	-83.236	2.363	-2.414	1.00	46.76
13749	OE2	GLU	C	206	-81.166	1.743	-2.054	1.00	46.59
13750	C	GLU	C	206	-81.891	0.645	3.224	1.00	38.87
13751	O	GLU	C	206	-82.511	-0.420	3.133	1.00	37.95
13752	N	VAL	C	207	-80.976	0.863	4.165	1.00	37.68
13753	CA	VAL	C	207	-80.731	-0.138	5.205	1.00	36.62
13754	CB	VAL	C	207	-79.429	0.141	5.967	1.00	36.79
13755	CG1	VAL	C	207	-79.170	-0.944	7.031	1.00	36.88
13756	CG2	VAL	C	207	-78.272	0.251	5.003	1.00	36.84
13757	C	VAL	C	207	-81.882	-0.074	6.193	1.00	35.27
13758	O	VAL	C	207	-82.170	0.986	6.724	1.00	35.26
13759	N	PRO	C	208	-82.565	-1.193	6.406	1.00	34.54
13760	CA	PRO	C	208	-83.661	-1.253	7.386	1.00	34.29

FIGURE 3 JJ

A	B	C	D	E	F	G	H	I	J
13761	CB	PRO	C	208	-84.179	-2.684	7.259	1.00	34.13
13762	CG	PRO	C	208	-83.709	-3.132	5.895	1.00	34.34
13763	CD	PRO	C	208	-82.366	-2.475	5.708	1.00	33.97
13764	C	PRO	C	208	-83.203	-0.978	8.813	1.00	33.90
13765	O	PRO	C	208	-82.027	-1.118	9.157	1.00	34.41
13766	N	LEU	C	209	-84.145	-0.574	9.648	1.00	33.81
13767	CA	LEU	C	209	-83.820	-0.198	11.005	1.00	33.49
13768	CB	LEU	C	209	-84.518	1.112	11.347	1.00	33.96
13769	CG	LEU	C	209	-84.559	2.182	10.248	1.00	35.02
13770	CD1	LEU	C	209	-83.316	3.015	10.268	1.00	34.09
13771	CD2	LEU	C	209	-85.796	3.058	10.413	1.00	36.67
13772	C	LEU	C	209	-84.240	-1.254	11.999	1.00	33.03
13773	O	LEU	C	209	-85.336	-1.812	11.901	1.00	33.09
13774	N	ILE	C	210	-83.355	-1.569	12.939	1.00	32.05
13775	CA	ILE	C	210	-83.777	-2.428	14.038	1.00	31.09
13776	CB	ILE	C	210	-82.587	-3.139	14.735	1.00	30.96
13777	CG1	ILE	C	210	-83.083	-3.992	15.904	1.00	29.69
13778	CD1	ILE	C	210	-84.158	-4.994	15.566	1.00	28.62
13779	CG2	ILE	C	210	-81.570	-2.128	15.243	1.00	30.43
13780	C	ILE	C	210	-84.488	-1.464	14.968	1.00	29.87
13781	O	ILE	C	210	-84.049	-0.341	15.128	1.00	29.51
13781	O	ILE	C	248	-84.049	-0.341	15.128	1.00	29.51
13782	N	GLU	C	249	-85.609	-1.884	15.531	1.00	29.61
13783	CA	GLU	C	249	-86.387	-1.015	16.414	1.00	29.40
13784	CB	GLU	C	249	-87.755	-0.709	15.798	1.00	29.74
13785	CG	GLU	C	249	-87.698	-0.227	14.343	1.00	31.91
13786	CD	GLU	C	249	-88.879	0.642	13.947	1.00	34.50
13787	OE1	GLU	C	249	-88.669	1.699	13.324	1.00	36.73
13788	OE2	GLU	C	249	-90.026	0.266	14.234	1.00	36.55
13789	C	GLU	C	249	-86.568	-1.727	17.740	1.00	29.26
13790	O	GLU	C	249	-86.836	-2.916	17.762	1.00	29.47
13791	N	TYR	C	250	-86.373	-1.014	18.847	1.00	28.74
13792	CA	TYR	C	250	-86.548	-1.604	20.163	1.00	27.93
13793	CB	TYR	C	250	-85.322	-2.427	20.596	1.00	27.74
13794	CG	TYR	C	250	-83.982	-1.700	20.561	1.00	28.43
13795	CD1	TYR	C	250	-83.541	-0.972	21.648	1.00	29.03
13796	CE1	TYR	C	250	-82.337	-0.318	21.633	1.00	28.97
13797	CZ	TYR	C	250	-81.525	-0.380	20.528	1.00	28.02
13798	OH	TYR	C	250	-80.316	0.283	20.565	1.00	26.76
13799	CE2	TYR	C	250	-81.912	-1.109	19.430	1.00	26.95
13800	CD2	TYR	C	250	-83.148	-1.769	19.449	1.00	28.64
13801	C	TYR	C	250	-86.877	-0.530	21.185	1.00	27.25
13802	O	TYR	C	250	-86.524	0.623	21.013	1.00	27.62
13803	N	SER	C	251	-87.586	-0.906	22.239	1.00	26.40
13804	CA	SER	C	251	-87.924	0.050	23.255	1.00	25.34
13805	CB	SER	C	251	-88.994	-0.495	24.182	1.00	25.35
13806	OG	SER	C	251	-90.180	-0.736	23.464	1.00	25.27
13807	C	SER	C	251	-86.726	0.418	24.075	1.00	24.88
13808	O	SER	C	251	-85.792	-0.381	24.268	1.00	25.16
13809	N	PHE	C	252	-86.731	1.660	24.528	1.00	23.79
13810	CA	PHE	C	252	-85.758	2.089	25.489	1.00	23.02
13811	CB	PHE	C	252	-84.758	3.070	24.904	1.00	21.59

FIGURE 3 JK

A	B	C	D	E	F	G	H	I	J
13812	CG	PHE	C	214	-83.581	3.303	25.797	1.00	22.14
13813	CD1	PHE	C	214	-83.545	4.395	26.643	1.00	20.47
13814	CE1	PHE	C	214	-82.474	4.602	27.495	1.00	21.26
13815	CZ	PHE	C	214	-81.416	3.713	27.509	1.00	21.13
13816	CE2	PHE	C	214	-81.451	2.599	26.684	1.00	22.44
13817	CD2	PHE	C	214	-82.527	2.393	25.835	1.00	21.49
13818	C	PHE	C	214	-86.610	2.728	26.563	1.00	23.30
13819	O	PHE	C	214	-87.362	3.663	26.302	1.00	23.83
13820	N	TYR	C	215	-86.491	2.237	27.780	1.00	23.67
13821	CA	TYR	C	215	-87.366	2.694	28.839	1.00	23.72
13822	CB	TYR	C	215	-87.613	1.520	29.770	1.00	23.53
13823	CG	TYR	C	215	-88.190	0.383	28.997	1.00	22.91
13824	CD1	TYR	C	215	-87.384	-0.632	28.505	1.00	21.36
13825	CE1	TYR	C	215	-87.929	-1.668	27.768	1.00	21.11
13826	CZ	TYR	C	215	-89.287	-1.690	27.518	1.00	22.99
13827	OH	TYR	C	215	-89.842	-2.706	26.779	1.00	26.40
13828	CE2	TYR	C	215	-90.099	-0.697	27.972	1.00	21.80
13829	CD2	TYR	C	215	-89.553	0.346	28.703	1.00	23.70
13830	C	TYR	C	215	-86.891	3.927	29.591	1.00	24.24
13831	O	TYR	C	215	-87.703	4.683	30.109	1.00	24.59
13832	N	SER	C	216	-85.586	4.126	29.640	1.00	25.17
13833	CA	SER	C	216	-84.986	5.301	30.267	1.00	26.77
13834	CB	SER	C	216	-85.482	6.590	29.593	1.00	26.93
13835	OG	SER	C	216	-84.636	7.712	29.858	1.00	25.11
13836	C	SER	C	216	-85.253	5.358	31.761	1.00	28.05
13837	O	SER	C	216	-85.719	4.371	32.378	1.00	28.16
13838	N	ASP	C	217	-84.952	6.513	32.338	1.00	28.88
13839	CA	ASP	C	217	-85.229	6.764	33.741	1.00	30.64
13840	CB	ASP	C	217	-84.914	8.209	34.133	1.00	31.51
13841	CG	ASP	C	217	-83.512	8.379	34.648	1.00	37.46
13842	OD1	ASP	C	217	-83.233	7.952	35.810	1.00	41.26
13843	OD2	ASP	C	217	-82.618	8.931	33.953	1.00	43.60
13844	C	ASP	C	217	-86.694	6.534	33.993	1.00	30.10
13845	O	ASP	C	217	-87.520	6.621	33.088	1.00	30.15
13846	N	GLU	C	218	-87.006	6.265	35.246	1.00	29.91
13847	CA	GLU	C	218	-88.366	6.038	35.687	1.00	30.08
13848	CB	GLU	C	218	-88.318	5.820	37.198	1.00	30.34
13849	CG	GLU	C	218	-89.642	5.457	37.808	1.00	30.57
13850	CD	GLU	C	218	-89.569	5.448	39.314	1.00	31.50
13851	OE1	GLU	C	218	-90.653	5.454	39.929	1.00	30.19
13852	OE2	GLU	C	218	-88.440	5.447	39.862	1.00	29.16
13853	C	GLU	C	218	-89.301	7.221	35.337	1.00	30.15
13854	O	GLU	C	218	-90.509	7.036	35.126	1.00	30.19
13855	N	SER	C	219	-88.742	8.425	35.272	1.00	29.61
13856	CA	SER	C	219	-89.499	9.629	34.911	1.00	30.11
13857	CB	SER	C	219	-88.603	10.862	34.990	1.00	29.74
13858	OG	SER	C	219	-88.685	11.435	36.276	1.00	34.17
13859	C	SER	C	219	-90.098	9.629	33.513	1.00	29.25
13860	O	SER	C	219	-91.072	10.316	33.273	1.00	29.39
13861	N	LEU	C	220	-89.477	8.929	32.576	1.00	28.72
13862	CA	LEU	C	220	-89.981	8.925	31.203	1.00	28.94

FIGURE 3 JL

A	B	C	D	E	F	G	H	I	J
13863	CB	LEU	C	220	-88.996	8.217	30.286	1.00	28.81
13864	CG	LEU	C	220	-88.787	8.724	28.853	1.00	30.91
13865	CD1	LEU	C	220	-88.739	7.557	27.884	1.00	28.91
13866	CD2	LEU	C	220	-89.816	9.778	28.417	1.00	30.79
13867	C	LEU	C	220	-91.297	8.168	31.180	1.00	28.69
13868	O	LEU	C	220	-91.309	6.955	31.379	1.00	28.71
13869	N	GLN	C	221	-92.402	8.860	30.924	1.00	28.48
13870	CA	GLN	C	221	-93.676	8.187	31.000	1.00	28.74
13871	CB	GLN	C	221	-94.816	9.140	31.424	1.00	29.01
13872	CG	GLN	C	221	-95.741	9.573	30.392	1.00	30.12
13873	CD	GLN	C	221	-96.905	10.394	30.935	1.00	31.70
13874	OE1	GLN	C	221	-97.183	11.478	30.426	1.00	33.47
13875	NE2	GLN	C	221	-97.612	9.863	31.926	1.00	29.51
13876	C	GLN	C	221	-93.999	7.275	29.823	1.00	28.55
13877	O	GLN	C	221	-94.591	6.220	30.015	1.00	28.97
13878	N	TYR	C	222	-93.611	7.666	28.613	1.00	28.68
13879	CA	TYR	C	222	-93.738	6.792	27.448	1.00	27.87
13880	CB	TYR	C	222	-94.384	7.540	26.292	1.00	27.58
13881	CG	TYR	C	222	-95.873	7.788	26.422	1.00	25.09
13882	CD1	TYR	C	222	-96.792	6.896	25.875	1.00	23.08
13883	CE1	TYR	C	222	-98.141	7.116	25.976	1.00	22.99
13884	CZ	TYR	C	222	-98.605	8.235	26.636	1.00	23.45
13885	OH	TYR	C	222	-99.971	8.460	26.706	1.00	22.97
13886	CE2	TYR	C	222	-97.706	9.128	27.187	1.00	23.41
13887	CD2	TYR	C	222	-96.351	8.897	27.077	1.00	20.70
13888	C	TYR	C	222	-92.332	6.389	27.028	1.00	28.24
13889	O	TYR	C	222	-91.489	7.247	26.827	1.00	28.57
13890	N	PRO	C	223	-92.071	5.099	26.884	1.00	28.60
13891	CA	PRO	C	223	-90.749	4.635	26.448	1.00	29.15
13892	CB	PRO	C	223	-90.902	3.112	26.380	1.00	28.83
13893	CG	PRO	C	223	-92.158	2.790	27.107	1.00	29.05
13894	CD	PRO	C	223	-93.020	3.994	27.098	1.00	28.79
13895	C	PRO	C	223	-90.428	5.145	25.037	1.00	29.93
13896	O	PRO	C	223	-91.359	5.358	24.232	1.00	29.83
13897	N	LYS	C	224	-89.140	5.316	24.751	1.00	30.03
13898	CA	LYS	C	224	-88.680	5.720	23.435	1.00	31.06
13899	CB	LYS	C	224	-87.387	6.546	23.532	1.00	31.64
13900	CG	LYS	C	224	-86.592	6.552	22.204	1.00	35.58
13901	CD	LYS	C	224	-85.428	7.565	22.147	1.00	40.48
13902	CE	LYS	C	224	-84.847	7.650	20.713	1.00	44.08
13903	NZ	LYS	C	224	-83.356	7.924	20.640	1.00	45.90
13904	C	LYS	C	224	-88.419	4.502	22.549	1.00	31.01
13905	O	LYS	C	224	-88.009	3.440	23.032	1.00	30.81
13906	N	THR	C	225	-88.669	4.651	21.253	1.00	30.57
13907	CA	THR	C	225	-88.321	3.610	20.319	1.00	30.52
13908	CB	THR	C	225	-89.414	3.434	19.277	1.00	30.58
13909	OG1	THR	C	225	-90.594	2.957	19.913	1.00	30.75
13910	CG2	THR	C	225	-89.071	2.285	18.342	1.00	31.23
13911	C	THR	C	225	-86.999	3.984	19.646	1.00	30.64
13912	O	THR	C	225	-86.906	4.988	18.937	1.00	29.95
13913	N	VAL	C	226	-85.975	3.176	19.881	1.00	30.60

# FIGURE 3 JM

A	B	C	D	E	F	G	H	I	J
13914	CA	VAL	C	226	-84.683	3.400	19.251	1.00	30.79
13915	CB	VAL	C	226	-83.556	2.748	20.065	1.00	30.79
13916	CG1	VAL	C	226	-82.233	2.876	19.354	1.00	30.14
13917	CG2	VAL	C	226	-83.464	3.369	21.450	1.00	30.56
13918	C	VAL	C	226	-84.697	2.817	17.835	1.00	31.13
13919	O	VAL	C	226	-85.176	1.709	17.616	1.00	30.73
13920	N	ARG	C	227	-84.177	3.572	16.872	1.00	31.64
13921	CA	ARG	C	227	-84.173	3.127	15.484	1.00	32.37
13922	CB	ARG	C	227	-85.163	3.952	14.663	1.00	32.33
13923	CG	ARG	C	227	-86.637	3.727	15.061	1.00	33.95
13924	CD	ARG	C	227	-87.646	4.587	14.293	1.00	36.77
13925	NE	ARG	C	227	-89.029	4.442	14.763	1.00	40.59
13926	CZ	ARG	C	227	-89.528	5.000	15.878	1.00	43.38
13927	NH1	ARG	C	227	-88.759	5.732	16.683	1.00	43.86
13928	NH2	ARG	C	227	-90.804	4.817	16.199	1.00	43.10
13929	C	ARG	C	227	-82.775	3.204	14.882	1.00	32.34
13930	O	ARG	C	227	-82.188	4.279	14.761	1.00	32.84
13931	N	VAL	C	228	-82.210	2.070	14.512	1.00	31.89
13932	CA	VAL	C	228	-80.858	2.152	13.996	1.00	31.57
13933	CB	VAL	C	228	-79.787	1.736	15.034	1.00	31.19
13934	CG1	VAL	C	228	-79.014	0.559	14.566	1.00	31.60
13935	CG2	VAL	C	228	-80.394	1.556	16.441	1.00	31.18
13936	C	VAL	C	228	-80.703	1.364	12.723	1.00	31.43
13937	O	VAL	C	228	-81.181	0.230	12.630	1.00	31.40
13938	N	PRO	C	229	-80.090	2.004	11.731	1.00	31.15
13939	CA	PRO	C	229	-79.833	1.383	10.439	1.00	31.51
13940	CB	PRO	C	229	-79.116	2.490	9.645	1.00	31.83
13941	CG	PRO	C	229	-79.540	3.747	10.291	1.00	31.61
13942	CD	PRO	C	229	-79.613	3.395	11.775	1.00	31.91
13943	C	PRO	C	229	-78.895	0.253	10.723	1.00	31.66
13944	O	PRO	C	229	-77.752	0.492	11.119	1.00	31.94
13945	N	TYR	C	230	-79.391	-0.960	10.518	1.00	31.57
13946	CA	TYR	C	230	-78.683	-2.164	10.856	1.00	31.68
13947	CB	TYR	C	230	-79.085	-2.562	12.286	1.00	31.52
13948	CG	TYR	C	230	-78.506	-3.857	12.828	1.00	30.56
13949	CD1	TYR	C	230	-77.802	-3.864	14.020	1.00	30.11
13950	CE1	TYR	C	230	-77.294	-5.046	14.548	1.00	30.51
13951	CZ	TYR	C	230	-77.497	-6.236	13.890	1.00	28.91
13952	OH	TYR	C	230	-76.971	-7.391	14.434	1.00	27.93
13953	CE2	TYR	C	230	-78.200	-6.262	12.697	1.00	28.65
13954	CD2	TYR	C	230	-78.698	-5.075	12.175	1.00	29.51
13955	C	TYR	C	230	-79.125	-3.224	9.879	1.00	31.77
13956	O	TYR	C	230	-80.296	-3.560	9.827	1.00	32.09
13957	N	PRO	C	231	-78.192	-3.727	9.086	1.00	32.17
13958	CA	PRO	C	231	-78.488	-4.767	8.097	1.00	32.64
13959	CB	PRO	C	231	-77.405	-4.565	7.030	1.00	32.47
13960	CG	PRO	C	231	-76.395	-3.609	7.636	1.00	32.79
13961	CD	PRO	C	231	-76.791	-3.289	9.043	1.00	32.22
13962	C	PRO	C	231	-78.354	-6.169	8.654	1.00	32.90
13963	O	PRO	C	231	-77.261	-6.626	8.996	1.00	32.61
13964	N	LYS	C	232	-79.469	-6.863	8.731	1.00	33.36

FIGURE 3 JN

A	B	C	D	E	F	G	H	I	J
13965	CA	LYS	C	232	-79.428	-8.228	9.165	1.00	34.36
13966	CB	LYS	C	232	-80.804	-8.664	9.664	1.00	34.43
13967	CG	LYS	C	232	-81.156	-8.056	11.023	1.00	34.61
13968	CD	LYS	C	232	-82.582	-8.402	11.485	1.00	34.22
13969	CE	LYS	C	232	-82.888	-7.773	12.872	1.00	34.56
13970	NZ	LYS	C	232	-82.178	-8.420	14.033	1.00	30.83
13971	C	LYS	C	232	-78.971	-9.004	7.949	1.00	35.12
13972	O	LYS	C	232	-78.910	-8.453	6.855	1.00	35.75
13973	N	ALA	C	233	-78.636	-10.274	8.117	1.00	35.80
13974	CA	ALA	C	233	-78.116	-11.039	6.989	1.00	36.32
13975	CB	ALA	C	233	-77.928	-12.488	7.368	1.00	35.65
13976	C	ALA	C	233	-79.052	-10.917	5.790	1.00	36.79
13977	O	ALA	C	233	-80.263	-10.969	5.948	1.00	37.65
13978	N	GLY	C	234	-78.481	-10.736	4.603	1.00	37.33
13979	CA	GLY	C	234	-79.248	-10.663	3.365	1.00	37.38
13980	C	GLY	C	234	-79.966	-9.377	3.008	1.00	37.11
13981	O	GLY	C	234	-80.513	-9.255	1.913	1.00	37.80
13982	N	ALA	C	235	-79.965	-8.407	3.910	1.00	37.21
13983	CA	ALA	C	235	-80.694	-7.159	3.683	1.00	36.87
13984	CB	ALA	C	235	-81.111	-6.552	5.020	1.00	36.57
13985	C	ALA	C	235	-79.842	-6.174	2.897	1.00	36.89
13986	O	ALA	C	235	-78.673	-6.440	2.628	1.00	37.64
13987	N	VAL	C	236	-80.388	-5.019	2.542	1.00	36.71
13988	CA	VAL	C	236	-79.549	-4.094	1.819	1.00	36.90
13989	CB	VAL	C	236	-80.339	-2.952	1.117	1.00	36.83
13990	CG1	VAL	C	236	-80.547	-1.787	2.050	1.00	37.74
13991	CG2	VAL	C	236	-81.660	-3.457	0.544	1.00	35.33
13992	C	VAL	C	236	-78.526	-3.486	2.779	1.00	37.52
13993	O	VAL	C	236	-78.868	-3.043	3.893	1.00	37.13
13994	N	ASN	C	237	-77.275	-3.480	2.335	1.00	37.50
13995	CA	ASN	C	237	-76.168	-2.904	3.077	1.00	38.17
13996	CB	ASN	C	237	-74.876	-3.663	2.750	1.00	38.39
13997	CG	ASN	C	237	-74.640	-4.852	3.651	1.00	38.73
13998	OD1	ASN	C	237	-73.833	-5.720	3.341	1.00	38.98
13999	ND2	ASN	C	237	-75.327	-4.886	4.779	1.00	38.15
14000	C	ASN	C	237	-75.965	-1.469	2.644	1.00	38.26
14001	O	ASN	C	237	-76.470	-1.049	1.603	1.00	38.10
14002	N	PRO	C	238	-75.232	-0.714	3.448	1.00	38.87
14003	CA	PRO	C	238	-74.833	0.638	3.059	1.00	39.39
14004	CB	PRO	C	238	-74.032	1.132	4.279	1.00	39.41
14005	CG	PRO	C	238	-73.607	-0.122	4.988	1.00	38.23
14006	CD	PRO	C	238	-74.774	-1.050	4.812	1.00	39.00
14007	C	PRO	C	238	-73.929	0.572	1.830	1.00	40.28
14008	O	PRO	C	238	-73.554	-0.542	1.383	1.00	40.34
14009	N	THR	C	239	-73.610	1.754	1.294	1.00	40.95
14010	CA	THR	C	239	-72.726	1.884	0.145	1.00	41.78
14011	CB	THR	C	239	-73.497	2.412	-1.092	1.00	42.17
14012	CG1	THR	C	239	-74.131	3.663	-0.773	1.00	41.20
14013	CG2	THR	C	239	-74.644	1.482	-1.470	1.00	40.36
14014	C	THR	C	239	-71.600	2.850	0.512	1.00	43.18
14015	O	THR	C	239	-71.805	3.775	1.302	1.00	42.77

FIGURE 3 JO

A	B	C	D	E	F	G	H	I	J
14016	N	VAL	C	240	-70.418	2.653	-0.065	1.00	44.55
14017	CA	VAL	C	240	-69.279	3.499	0.287	1.00	45.93
14018	CB	VAL	C	240	-68.159	2.683	0.955	1.00	45.40
14019	CG1	VAL	C	240	-68.513	2.392	2.389	1.00	46.36
14020	CG2	VAL	C	240	-67.896	1.400	0.183	1.00	45.22
14021	C	VAL	C	240	-68.667	4.274	-0.863	1.00	46.82
14022	O	VAL	C	240	-68.697	3.838	-2.008	1.00	46.51
14023	N	LYS	C	241	-68.094	5.420	-0.518	1.00	48.42
14024	CA	LYS	C	241	-67.441	6.308	-1.460	1.00	50.07
14025	CB	LYS	C	241	-68.340	7.511	-1.757	1.00	49.74
14026	CG	LYS	C	241	-69.445	7.279	-2.786	1.00	50.25
14027	CD	LYS	C	241	-70.292	8.538	-2.923	1.00	49.63
14028	CE	LYS	C	241	-71.065	8.574	-4.227	1.00	50.24
14029	NZ	LYS	C	241	-71.910	7.371	-4.440	1.00	49.74
14030	C	LYS	C	241	-66.171	6.823	-0.802	1.00	51.37
14031	O	LYS	C	241	-66.224	7.370	0.305	1.00	51.62
14032	N	PHE	C	242	-65.027	6.641	-1.453	1.00	52.68
14033	CA	PHE	C	242	-63.797	7.171	-0.883	1.00	54.02
14034	CB	PHE	C	242	-62.614	6.199	-0.980	1.00	54.09
14035	CG	PHE	C	242	-61.393	6.690	-0.249	1.00	55.54
14036	CD1	PHE	C	242	-60.987	6.107	0.940	1.00	56.76
14037	CE1	PHE	C	242	-59.880	6.599	1.617	1.00	57.97
14038	CZ	PHE	C	242	-59.178	7.689	1.110	1.00	57.90
14039	CE2	PHE	C	242	-59.583	8.278	-0.061	1.00	56.86
14040	CD2	PHE	C	242	-60.683	7.783	-0.730	1.00	56.12
14041	C	PHE	C	242	-63.451	8.512	-1.516	1.00	54.71
14042	O	PHE	C	242	-63.628	8.708	-2.712	1.00	54.36
14043	N	PHE	C	243	-62.975	9.430	-0.682	1.00	55.72
14044	CA	PHE	C	243	-62.602	10.763	-1.111	1.00	56.89
14045	CB	PHE	C	243	-63.699	11.777	-0.755	1.00	56.82
14046	CG	PHE	C	243	-64.992	11.565	-1.486	1.00	57.69
14047	CD1	PHE	C	243	-66.010	10.808	-0.921	1.00	57.77
14048	CE1	PHE	C	243	-67.209	10.621	-1.590	1.00	57.00
14049	CZ	PHE	C	243	-67.400	11.193	-2.824	1.00	57.21
14050	CE2	PHE	C	243	-66.395	11.956	-3.399	1.00	57.20
14051	CD2	PHE	C	243	-65.204	12.142	-2.732	1.00	57.47
14052	C	PHE	C	243	-61.334	11.194	-0.396	1.00	57.53
14053	O	PHE	C	243	-60.980	10.652	0.651	1.00	57.70
14054	N	VAL	C	244	-60.653	12.176	-0.966	1.00	58.09
14055	CA	VAL	C	244	-59.506	12.770	-0.313	1.00	58.87
14056	CB	VAL	C	244	-58.169	12.138	-0.731	1.00	58.76
14057	CG1	VAL	C	244	-58.293	11.448	-2.070	1.00	58.84
14058	CG2	VAL	C	244	-57.057	13.186	-0.731	1.00	58.56
14059	C	VAL	C	244	-59.519	14.245	-0.613	1.00	59.44
14060	O	VAL	C	244	-59.866	14.668	-1.715	1.00	59.55
14061	N	VAL	C	245	-59.170	15.028	0.391	1.00	60.36
14062	CA	VAL	C	245	-59.155	16.459	0.235	1.00	61.31
14063	CB	VAL	C	245	-60.258	17.107	1.093	1.00	61.05
14064	CG1	VAL	C	245	-59.992	16.895	2.571	1.00	61.29
14065	CG2	VAL	C	245	-60.390	18.584	0.770	1.00	61.48
14066	C	VAL	C	245	-57.769	17.010	0.571	1.00	61.85



FIGURE 3 JP

A	B	C	D	E	F	G	H	I	J
14067	O	VAL	C	245	-57.064	16.477	1.430	1.00	61.82
14068	N	ASN	C	246	-57.384	18.064	-0.143	1.00	62.81
14069	CA	ASN	C	246	-56.110	18.750	0.056	1.00	63.66
14070	CB	ASN	C	246	-55.588	19.263	-1.289	1.00	63.75
14071	CG	ASN	C	246	-54.250	19.973	-1.174	1.00	64.57
14072	OD1	ASN	C	246	-53.191	19.372	-1.384	1.00	65.06
14073	ND2	ASN	C	246	-54.289	21.265	-0.859	1.00	64.15
14074	C	ASN	C	246	-56.328	19.899	1.030	1.00	64.22
14075	O	ASN	C	246	-57.011	20.865	0.705	1.00	64.23
14076	N	THR	C	247	-55.750	19.798	2.224	1.00	65.16
14077	CA	THR	C	247	-56.007	20.795	3.263	1.00	66.53
14078	CB	THR	C	247	-55.968	20.165	4.679	1.00	66.37
14079	OG1	THR	C	247	-54.741	19.447	4.864	1.00	66.45
14080	CG2	THR	C	247	-57.047	19.092	4.820	1.00	66.38
14081	C	THR	C	247	-55.177	22.082	3.225	1.00	67.57
14082	O	THR	C	247	-55.466	23.017	3.973	1.00	68.02
14083	N	ASP	C	248	-54.158	22.151	2.376	1.00	68.75
14084	CA	ASP	C	248	-53.390	23.389	2.263	1.00	69.81
14085	CB	ASP	C	248	-51.950	23.115	1.833	1.00	69.78
14086	CG	ASP	C	248	-51.197	22.270	2.838	1.00	70.26
14087	OD1	ASP	C	248	-50.312	21.494	2.420	1.00	70.80
14088	OD2	ASP	C	248	-51.423	22.316	4.068	1.00	70.35
14089	C	ASP	C	248	-54.075	24.341	1.286	1.00	70.64
14090	O	ASP	C	248	-54.036	25.565	1.453	1.00	70.76
14091	N	SER	C	249	-54.718	23.763	0.274	1.00	71.41
14092	CA	SER	C	249	-55.424	24.542	-0.738	1.00	72.19
14093	CB	SER	C	249	-55.500	23.774	-2.065	1.00	72.21
14094	OG	SER	C	249	-56.273	22.590	-1.945	1.00	71.64
14095	C	SER	C	249	-56.827	24.938	-0.279	1.00	72.92
14096	O	SER	C	249	-57.689	25.270	-1.100	1.00	73.16
14097	N	LEU	C	250	-57.057	24.900	1.030	1.00	73.60
14098	CA	LEU	C	250	-58.360	25.263	1.568	1.00	74.16
14099	CB	LEU	C	250	-58.530	24.787	3.016	1.00	74.23
14100	CG	LEU	C	250	-58.793	23.297	3.247	1.00	74.48
14101	CD1	LEU	C	250	-58.989	23.012	4.724	1.00	74.84
14102	CD2	LEU	C	250	-59.995	22.812	2.447	1.00	74.30
14103	C	LEU	C	250	-58.552	26.759	1.504	1.00	74.46
14104	O	LEU	C	250	-57.832	27.513	2.154	1.00	74.68
14105	N	SER	C	251	-59.513	27.183	0.696	1.00	74.74
14106	CA	SER	C	251	-59.874	28.587	0.619	1.00	74.97
14107	CB	SER	C	251	-60.143	28.985	-0.831	1.00	74.98
14108	OG	SER	C	251	-60.339	27.830	-1.635	1.00	75.33
14109	C	SER	C	251	-61.108	28.778	1.494	1.00	75.02
14110	O	SER	C	251	-61.910	27.853	1.646	1.00	75.26
14111	N	SER	C	252	-61.248	29.958	2.090	1.00	75.01
14112	CA	SER	C	252	-62.381	30.230	2.974	1.00	75.02
14113	CB	SER	C	252	-61.977	31.178	4.114	1.00	75.12
14114	OG	SER	C	252	-61.536	32.438	3.632	1.00	74.96
14115	C	SER	C	252	-63.589	30.779	2.221	1.00	75.05
14116	O	SER	C	252	-64.675	30.932	2.785	1.00	75.18
14117	N	VAL	C	253	-63.398	31.061	0.939	1.00	74.92

FIGURE 3 JQ

A	B	C	D	E	F	G	H	I	J
14118	CA	VAL	C	253	-64.463	31.625	0.121	1.00	74.78
14119	CB	VAL	C	253	-63.973	32.869	-0.635	1.00	74.98
14120	CG1	VAL	C	253	-65.068	33.409	-1.549	1.00	75.28
14121	CG2	VAL	C	253	-63.507	33.942	0.345	1.00	75.20
14122	C	VAL	C	253	-64.983	30.619	-0.893	1.00	74.54
14123	O	VAL	C	253	-65.985	30.854	-1.577	1.00	74.56
14124	N	THR	C	254	-64.291	29.493	-0.992	1.00	74.00
14125	CA	THR	C	254	-64.680	28.472	-1.941	1.00	73.39
14126	CB	THR	C	254	-63.672	28.420	-3.090	1.00	73.52
14127	OG1	THR	C	254	-63.590	29.716	-3.695	1.00	73.59
14128	CG2	THR	C	254	-64.191	27.533	-4.212	1.00	73.80
14129	C	THR	C	254	-64.782	27.121	-1.257	1.00	72.75
14130	O	THR	C	254	-63.789	26.602	-0.731	1.00	72.46
14131	N	ASN	C	255	-65.994	26.570	-1.249	1.00	71.75
14132	CA	ASN	C	255	-66.223	25.262	-0.662	1.00	70.61
14133	CB	ASN	C	255	-67.600	24.710	-1.048	1.00	70.63
14134	CG	ASN	C	255	-68.724	25.334	-0.243	1.00	71.20
14135	OD1	ASN	C	255	-68.487	25.955	0.794	1.00	71.73
14136	ND2	ASN	C	255	-69.957	25.174	-0.718	1.00	72.81
14137	C	ASN	C	255	-65.119	24.324	-1.124	1.00	69.67
14138	O	ASN	C	255	-64.680	24.384	-2.274	1.00	69.53
14139	N	ALA	C	256	-64.655	23.475	-0.219	1.00	68.42
14140	CA	ALA	C	256	-63.585	22.549	-0.542	1.00	67.23
14141	CB	ALA	C	256	-63.119	21.826	0.709	1.00	67.12
14142	C	ALA	C	256	-64.039	21.554	-1.599	1.00	66.42
14143	O	ALA	C	256	-65.197	21.138	-1.617	1.00	66.17
14144	N	THR	C	257	-63.127	21.195	-2.495	1.00	65.41
14145	CA	THR	C	257	-63.431	20.214	-3.521	1.00	64.47
14146	CB	THR	C	257	-62.896	20.652	-4.908	1.00	64.80
14147	OG1	THR	C	257	-63.358	19.737	-5.917	1.00	65.37
14148	CG2	THR	C	257	-61.375	20.542	-4.977	1.00	64.56
14149	C	THR	C	257	-62.797	18.923	-3.056	1.00	63.52
14150	O	THR	C	257	-61.685	18.922	-2.530	1.00	63.59
14151	N	SER	C	258	-63.512	17.821	-3.209	1.00	62.13
14152	CA	SER	C	258	-63.002	16.557	-2.718	1.00	60.62
14153	CB	SER	C	258	-63.951	15.986	-1.666	1.00	60.88
14154	OG	SER	C	258	-64.412	17.019	-0.806	1.00	61.43
14155	C	SER	C	258	-62.821	15.585	-3.861	1.00	59.48
14156	O	SER	C	258	-63.725	15.397	-4.679	1.00	58.94
14157	N	ILE	C	259	-61.647	14.965	-3.903	1.00	58.18
14158	CA	ILE	C	259	-61.323	14.032	-4.967	1.00	56.94
14159	CB	ILE	C	259	-59.813	14.045	-5.284	1.00	57.27
14160	CG1	ILE	C	259	-59.326	15.480	-5.529	1.00	57.02
14161	CD1	ILE	C	259	-60.191	16.268	-6.503	1.00	57.66
14162	CG2	ILE	C	259	-59.512	13.112	-6.467	1.00	56.47
14163	C	ILE	C	259	-61.749	12.631	-4.614	1.00	56.04
14164	O	ILE	C	259	-61.228	12.020	-3.680	1.00	55.73
14165	N	GLN	C	260	-62.701	12.121	-5.382	1.00	54.99
14166	CA	GLN	C	260	-63.181	10.771	-5.182	1.00	53.54
14167	CB	GLN	C	260	-64.550	10.602	-5.834	1.00	53.37
14168	CG	GLN	C	260	-65.003	9.173	-5.955	1.00	52.83

FIGURE 3 JR

A	B	C	D	E	F	G	H	I	J
14169	CD	GLN	C	260	-66.501	9.062	-6.058	1.00	52.58
14170	OE1	GLN	C	260	-67.165	9.987	-6.523	1.00	52.38
14171	NE2	GLN	C	260	-67.044	7.941	-5.604	1.00	51.95
14172	C	GLN	C	260	-62.216	9.772	-5.772	1.00	52.72
14173	O	GLN	C	260	-61.633	10.012	-6.821	1.00	52.95
14174	N	ILE	C	261	-62.024	8.666	-5.069	1.00	51.88
14175	CA	ILE	C	261	-61.265	7.540	-5.592	1.00	50.87
14176	CB	ILE	C	261	-60.093	7.154	-4.682	1.00	50.78
14177	CG1	ILE	C	261	-59.054	8.276	-4.640	1.00	50.76
14178	CD1	ILE	C	261	-57.869	7.981	-3.754	1.00	50.25
14179	CG2	ILE	C	261	-59.457	5.856	-5.164	1.00	50.19
14180	C	ILE	C	261	-62.268	6.416	-5.632	1.00	50.47
14181	O	ILE	C	261	-62.616	5.852	-4.602	1.00	50.34
14182	N	THR	C	262	-62.771	6.123	-6.818	1.00	50.10
14183	CA	THR	C	262	-63.742	5.059	-6.976	1.00	49.78
14184	CB	THR	C	262	-64.232	4.987	-8.436	1.00	50.03
14185	OG1	THR	C	262	-64.633	3.638	-8.732	1.00	51.14
14186	CG2	THR	C	262	-63.079	5.206	-9.389	1.00	49.30
14187	C	THR	C	262	-63.111	3.742	-6.614	1.00	49.16
14188	O	THR	C	262	-61.903	3.645	-6.486	1.00	49.47
14189	N	ALA	C	263	-63.940	2.725	-6.461	1.00	48.84
14190	CA	ALA	C	263	-63.459	1.384	-6.187	1.00	48.32
14191	CB	ALA	C	263	-64.470	0.632	-5.318	1.00	48.02
14192	C	ALA	C	263	-63.258	0.660	-7.516	1.00	47.91
14193	O	ALA	C	263	-63.867	1.019	-8.523	1.00	47.60
14194	N	PRO	C	264	-62.412	-0.364	-7.516	1.00	47.56
14195	CA	PRO	C	264	-62.154	-1.157	-8.724	1.00	47.36
14196	CB	PRO	C	264	-61.143	-2.204	-8.247	1.00	47.26
14197	CG	PRO	C	264	-60.533	-1.599	-7.027	1.00	47.84
14198	CD	PRO	C	264	-61.624	-0.830	-6.368	1.00	47.47
14199	C	PRO	C	264	-63.403	-1.840	-9.275	1.00	46.88
14200	O	PRO	C	264	-64.324	-2.197	-8.530	1.00	46.44
14201	N	ALA	C	265	-63.408	-2.036	-10.590	1.00	46.60
14202	CA	ALA	C	265	-64.536	-2.655	-11.280	1.00	45.96
14203	CB	ALA	C	265	-64.222	-2.851	-12.761	1.00	46.10
14204	C	ALA	C	265	-64.925	-3.975	-10.650	1.00	45.47
14205	O	ALA	C	265	-66.106	-4.271	-10.503	1.00	45.40
14206	N	SER	C	266	-63.932	-4.776	-10.282	1.00	45.07
14207	CA	SER	C	266	-64.211	-6.087	-9.691	1.00	44.62
14208	CB	SER	C	266	-62.923	-6.865	-9.440	1.00	44.26
14209	OG	SER	C	266	-61.973	-6.047	-8.785	1.00	43.86
14210	C	SER	C	266	-65.033	-5.945	-8.410	1.00	44.41
14211	O	SER	C	266	-65.690	-6.890	-7.978	1.00	44.20
14212	N	MET	C	267	-64.993	-4.755	-7.815	1.00	44.50
14213	CA	MET	C	267	-65.825	-4.451	-6.650	1.00	44.69
14214	CB	MET	C	267	-65.112	-3.477	-5.701	1.00	44.90
14215	CG	MET	C	267	-63.871	-4.043	-5.042	1.00	45.44
14216	SD	MET	C	267	-64.293	-5.235	-3.769	1.00	47.95
14217	CE	MET	C	267	-63.329	-6.664	-4.304	1.00	46.70
14218	C	MET	C	267	-67.157	-3.828	-7.083	1.00	44.34
14219	O	MET	C	267	-68.213	-4.219	-6.597	1.00	44.15

FIGURE 3 JS

A	B	C	D	E	F	G	H	I	J
14220	N	LEU	C	268	-67.093	-2.873	-8.012	1.00	44.09
14221	CA	LEU	C	268	-68.274	-2.116	-8.432	1.00	44.09
14222	CB	LEU	C	268	-67.906	-1.030	-9.443	1.00	44.01
14223	CG	LEU	C	268	-67.101	0.162	-8.937	1.00	44.40
14224	CD1	LEU	C	268	-66.979	1.237	-10.015	1.00	43.41
14225	CD2	LEU	C	268	-67.709	0.730	-7.642	1.00	45.00
14226	C	LEU	C	268	-69.409	-2.958	-8.996	1.00	44.07
14227	O	LEU	C	268	-70.566	-2.567	-8.890	1.00	44.00
14228	N	ILE	C	269	-69.083	-4.114	-9.569	1.00	44.00
14229	CA	ILE	C	269	-70.101	-4.985	-10.159	1.00	44.30
14230	CB	ILE	C	269	-69.451	-6.166	-10.928	1.00	44.31
14231	CG1	ILE	C	269	-68.630	-7.021	-9.969	1.00	45.18
14232	CD1	ILE	C	269	-68.240	-8.361	-10.530	1.00	46.09
14233	CG2	ILE	C	269	-68.585	-5.669	-12.087	1.00	43.57
14234	C	ILE	C	269	-71.072	-5.555	-9.131	1.00	44.44
14235	O	ILE	C	269	-72.051	-6.214	-9.494	1.00	44.73
14236	N	GLY	C	270	-70.790	-5.345	-7.851	1.00	43.90
14237	CA	GLY	C	270	-71.658	-5.871	-6.818	1.00	43.72
14238	C	GLY	C	270	-71.495	-5.190	-5.475	1.00	43.60
14239	O	GLY	C	270	-70.819	-4.167	-5.345	1.00	43.14
14240	N	ASP	C	271	-72.119	-5.775	-4.465	1.00	43.63
14241	CA	ASP	C	271	-72.050	-5.223	-3.128	1.00	43.31
14242	CB	ASP	C	271	-73.116	-5.842	-2.245	1.00	43.86
14243	CG	ASP	C	271	-74.481	-5.241	-2.505	1.00	44.75
14244	OD1	ASP	C	271	-74.521	-4.094	-3.004	1.00	45.20
14245	OD2	ASP	C	271	-75.550	-5.826	-2.246	1.00	45.69
14246	C	ASP	C	271	-70.660	-5.439	-2.585	1.00	42.91
14247	O	ASP	C	271	-70.074	-6.490	-2.786	1.00	43.04
14248	N	HIS	C	272	-70.130	-4.427	-1.915	1.00	42.37
14249	CA	HIS	C	272	-68.750	-4.475	-1.460	1.00	41.96
14250	CB	HIS	C	272	-67.844	-4.054	-2.623	1.00	41.32
14251	CG	HIS	C	272	-68.232	-2.746	-3.240	1.00	38.55
14252	ND1	HIS	C	272	-69.211	-2.640	-4.203	1.00	34.97
14253	CE1	HIS	C	272	-69.344	-1.373	-4.556	1.00	34.24
14254	NE2	HIS	C	272	-68.491	-0.651	-3.851	1.00	35.77
14255	CD2	HIS	C	272	-67.781	-1.487	-3.021	1.00	36.40
14256	C	HIS	C	272	-68.518	-3.566	-0.255	1.00	42.07
14257	O	HIS	C	272	-69.423	-2.842	0.172	1.00	42.07
14258	N	TYR	C	273	-67.300	-3.588	0.278	1.00	42.29
14259	CA	TYR	C	273	-66.963	-2.765	1.439	1.00	42.72
14260	CB	TYR	C	273	-66.970	-3.606	2.716	1.00	42.37
14261	CG	TYR	C	273	-68.138	-4.548	2.907	1.00	41.64
14262	CD1	TYR	C	273	-69.362	-4.080	3.368	1.00	41.07
14263	CE1	TYR	C	273	-70.424	-4.942	3.574	1.00	40.67
14264	CZ	TYR	C	273	-70.271	-6.290	3.330	1.00	40.24
14265	OH	TYR	C	273	-71.343	-7.133	3.535	1.00	40.59
14266	CE2	TYR	C	273	-69.058	-6.788	2.884	1.00	40.36
14267	CD2	TYR	C	273	-67.999	-5.919	2.682	1.00	40.82
14268	C	TYR	C	273	-65.577	-2.124	1.355	1.00	43.60
14269	O	TYR	C	273	-64.675	-2.678	0.730	1.00	43.62
14270	N	LEU	C	274	-65.402	-0.970	1.994	1.00	44.77

FIGURE 3 JT

A	B	C	D	E	F	G	H	I	J
14271	CA	LEU	C	274	-64.067	-0.416	2.155	1.00	46.15
14272	CB	LEU	C	274	-64.114	1.092	2.343	1.00	46.18
14273	CG	LEU	C	274	-62.768	1.700	2.732	1.00	46.97
14274	CD1	LEU	C	274	-61.658	1.166	1.829	1.00	47.57
14275	CD2	LEU	C	274	-62.832	3.229	2.702	1.00	47.38
14276	C	LEU	C	274	-63.553	-1.092	3.422	1.00	47.02
14277	O	LEU	C	274	-64.112	-0.883	4.492	1.00	46.97
14278	N	CYS	C	275	-62.528	-1.930	3.317	1.00	48.36
14279	CA	CYS	C	275	-62.078	-2.649	4.506	1.00	50.35
14280	CB	CYS	C	275	-62.272	-4.153	4.347	1.00	50.01
14281	SG	CYS	C	275	-61.346	-4.890	2.996	1.00	52.51
14282	C	CYS	C	275	-60.651	-2.360	4.956	1.00	51.53
14283	O	CYS	C	275	-60.147	-2.998	5.888	1.00	52.17
14284	N	ASP	C	276	-59.998	-1.413	4.297	1.00	52.41
14285	CA	ASP	C	276	-58.664	-1.032	4.702	1.00	53.27
14286	CB	ASP	C	276	-57.677	-2.175	4.511	1.00	53.57
14287	CG	ASP	C	276	-56.311	-1.848	5.074	1.00	54.87
14288	OD1	ASP	C	276	-55.310	-2.096	4.365	1.00	56.47
14289	OD2	ASP	C	276	-56.143	-1.328	6.204	1.00	54.19
14290	C	ASP	C	276	-58.174	0.203	3.977	1.00	53.65
14291	O	ASP	C	276	-58.278	0.318	2.757	1.00	53.84
14292	N	VAL	C	277	-57.641	1.125	4.763	1.00	53.91
14293	CA	VAL	C	277	-57.106	2.371	4.273	1.00	54.34
14294	CB	VAL	C	277	-58.036	3.548	4.625	1.00	54.24
14295	CG1	VAL	C	277	-57.453	4.869	4.134	1.00	54.06
14296	CG2	VAL	C	277	-59.414	3.324	4.048	1.00	54.19
14297	C	VAL	C	277	-55.757	2.574	4.958	1.00	54.98
14298	O	VAL	C	277	-55.683	2.734	6.188	1.00	54.79
14299	N	THR	C	278	-54.692	2.527	4.164	1.00	55.50
14300	CA	THR	C	278	-53.345	2.735	4.670	1.00	55.69
14301	CB	THR	C	278	-52.566	1.423	4.684	1.00	55.79
14302	OG1	THR	C	278	-53.233	0.472	5.523	1.00	55.96
14303	CG2	THR	C	278	-51.210	1.624	5.357	1.00	55.85
14304	C	THR	C	278	-52.622	3.741	3.786	1.00	55.98
14305	O	THR	C	278	-52.516	3.557	2.574	1.00	55.78
14306	N	TRP	C	279	-52.142	4.816	4.395	1.00	56.25
14307	CA	TRP	C	279	-51.394	5.828	3.674	1.00	56.54
14308	CB	TRP	C	279	-51.375	7.120	4.475	1.00	56.35
14309	CG	TRP	C	279	-52.436	8.091	4.107	1.00	55.30
14310	CD1	TRP	C	279	-53.543	8.416	4.838	1.00	53.48
14311	NE1	TRP	C	279	-54.278	9.373	4.183	1.00	52.45
14312	CE2	TRP	C	279	-53.651	9.683	3.004	1.00	53.78
14313	CD2	TRP	C	279	-52.484	8.897	2.928	1.00	54.42
14314	CE3	TRP	C	279	-51.662	9.031	1.805	1.00	54.58
14315	CZ3	TRP	C	279	-52.021	9.938	0.821	1.00	53.93
14316	CH2	TRP	C	279	-53.189	10.694	0.927	1.00	53.45
14317	CZ2	TRP	C	279	-54.015	10.580	2.007	1.00	54.14
14318	C	TRP	C	279	-49.966	5.349	3.480	1.00	57.14
14319	O	TRP	C	279	-49.249	5.127	4.455	1.00	57.29
14320	N	ALA	C	280	-49.561	5.172	2.227	1.00	57.66
14321	CA	ALA	C	280	-48.199	4.760	1.914	1.00	58.20

FIGURE 3 JU

A	B	C	D	E	F	G	H	I	J
14322	CB	ALA	C	280	-48.136	4.169	0.526	1.00	57.88
14323	C	ALA	C	280	-47.247	5.952	2.028	1.00	58.89
14324	O	ALA	C	280	-46.257	5.897	2.758	1.00	59.08
14325	N	THR	C	281	-47.538	7.023	1.293	1.00	59.60
14326	CA	THR	C	281	-46.702	8.222	1.346	1.00	60.36
14327	CB	THR	C	281	-45.701	8.253	0.193	1.00	60.29
14328	OG1	THR	C	281	-46.287	8.976	-0.896	1.00	60.03
14329	CG2	THR	C	281	-45.461	6.863	-0.364	1.00	60.47
14330	C	THR	C	281	-47.481	9.522	1.247	1.00	60.88
14331	O	THR	C	281	-48.709	9.550	1.202	1.00	61.43
14332	N	GLN	C	282	-46.733	10.607	1.170	1.00	61.16
14333	CA	GLN	C	282	-47.343	11.904	1.032	1.00	61.59
14334	CB	GLN	C	282	-46.272	12.974	0.816	1.00	61.79
14335	CG	GLN	C	282	-45.423	13.237	2.038	1.00	63.16
14336	CD	GLN	C	282	-46.258	13.608	3.244	1.00	65.36
14337	OE1	GLN	C	282	-45.763	13.591	4.376	1.00	65.87
14338	NE2	GLN	C	282	-47.527	13.954	3.009	1.00	65.20
14339	C	GLN	C	282	-48.314	11.911	-0.135	1.00	61.32
14340	O	GLN	C	282	-49.249	12.711	-0.158	1.00	61.40
14341	N	GLU	C	283	-48.103	11.015	-1.095	1.00	61.05
14342	CA	GLU	C	283	-48.911	11.013	-2.314	1.00	60.95
14343	CB	GLU	C	283	-48.185	11.798	-3.420	1.00	61.02
14344	CG	GLU	C	283	-47.517	13.073	-2.913	1.00	61.35
14345	CD	GLU	C	283	-47.018	13.989	-4.019	1.00	61.87
14346	OE1	GLU	C	283	-46.959	15.219	-3.784	1.00	62.48
14347	OE2	GLU	C	283	-46.679	13.492	-5.114	1.00	61.70
14348	C	GLU	C	283	-49.276	9.606	-2.792	1.00	60.60
14349	O	GLU	C	283	-49.792	9.421	-3.889	1.00	60.67
14350	N	ARG	C	284	-48.988	8.610	-1.974	1.00	60.31
14351	CA	ARG	C	284	-49.396	7.257	-2.296	1.00	60.24
14352	CB	ARG	C	284	-48.186	6.333	-2.405	1.00	60.38
14353	CG	ARG	C	284	-48.513	4.966	-2.975	1.00	61.76
14354	CD	ARG	C	284	-47.297	4.070	-3.220	1.00	64.45
14355	NE	ARG	C	284	-47.024	3.849	-4.642	1.00	66.08
14356	CZ	ARG	C	284	-45.907	4.217	-5.258	1.00	67.07
14357	NH1	ARG	C	284	-44.946	4.839	-4.587	1.00	67.77
14358	NH2	ARG	C	284	-45.751	3.969	-6.549	1.00	67.48
14359	C	ARG	C	284	-50.354	6.789	-1.198	1.00	59.88
14360	O	ARG	C	284	-50.088	6.980	-0.006	1.00	59.99
14361	N	ILE	C	285	-51.479	6.205	-1.598	1.00	59.05
14362	CA	ILE	C	285	-52.471	5.739	-0.637	1.00	58.17
14363	CB	ILE	C	285	-53.586	6.808	-0.433	1.00	58.15
14364	CG1	ILE	C	285	-54.385	6.519	0.837	1.00	57.95
14365	CD1	ILE	C	285	-55.586	7.413	1.014	1.00	57.24
14366	CG2	ILE	C	285	-54.504	6.886	-1.639	1.00	57.93
14367	C	ILE	C	285	-53.034	4.375	-1.054	1.00	57.55
14368	O	ILE	C	285	-53.385	4.164	-2.213	1.00	57.33
14369	N	SER	C	286	-53.090	3.447	-0.102	1.00	56.84
14370	CA	SER	C	286	-53.557	2.086	-0.372	1.00	56.29
14371	CB	SER	C	286	-52.597	1.062	0.222	1.00	56.12
14372	OG	SER	C	286	-52.516	1.218	1.626	1.00	56.72

FIGURE 3 JV

A	B	C	D	E	F	G	H	I	J
14373	C	SER	C	286	-54.957	1.842	0.172	1.00	55.84
14374	O	SER	C	286	-55.284	2.240	1.290	1.00	55.91
14375	N	LEU	C	287	-55.769	1.162	-0.626	1.00	55.13
14376	CA	LEU	C	287	-57.155	0.907	-0.288	1.00	54.33
14377	CB	LEU	C	287	-58.076	1.754	-1.173	1.00	54.49
14378	CG	LEU	C	287	-58.644	3.098	-0.714	1.00	54.81
14379	CD1	LEU	C	287	-59.270	3.804	-1.904	1.00	54.83
14380	CD2	LEU	C	287	-57.608	4.013	-0.054	1.00	56.22
14381	C	LEU	C	287	-57.466	-0.544	-0.541	1.00	53.83
14382	O	LEU	C	287	-57.085	-1.090	-1.570	1.00	53.38
14383	N	GLN	C	288	-58.152	-1.173	0.409	1.00	53.46
14384	CA	GLN	C	288	-58.595	-2.548	0.241	1.00	52.63
14385	CB	GLN	C	288	-58.025	-3.456	1.322	1.00	53.22
14386	CG	GLN	C	288	-56.586	-3.842	1.052	1.00	54.49
14387	CD	GLN	C	288	-56.334	-5.335	1.246	1.00	57.06
14388	OE1	GLN	C	288	-55.607	-5.726	2.159	1.00	55.92
14389	NE2	GLN	C	288	-56.933	-6.171	0.388	1.00	57.21
14390	C	GLN	C	288	-60.115	-2.596	0.208	1.00	51.78
14391	O	GLN	C	288	-60.792	-1.917	0.992	1.00	51.73
14392	N	TRP	C	289	-60.638	-3.380	-0.730	1.00	50.66
14393	CA	TRP	C	289	-62.070	-3.483	-0.950	1.00	49.28
14394	CB	TRP	C	289	-62.453	-2.905	-2.320	1.00	48.86
14395	CG	TRP	C	289	-62.150	-1.443	-2.541	1.00	46.49
14396	CD1	TRP	C	289	-60.994	-0.910	-3.041	1.00	44.92
14397	NE1	TRP	C	289	-61.092	0.460	-3.118	1.00	42.33
14398	CE2	TRP	C	289	-62.324	0.844	-2.670	1.00	43.12
14399	CD2	TRP	C	289	-63.023	-0.330	-2.298	1.00	44.71
14400	CE3	TRP	C	289	-64.326	-0.202	-1.813	1.00	44.04
14401	CZ3	TRP	C	289	-64.884	1.068	-1.710	1.00	43.97
14402	CH2	TRP	C	289	-64.164	2.209	-2.083	1.00	44.51
14403	CZ2	TRP	C	289	-62.884	2.118	-2.567	1.00	43.61
14404	C	TRP	C	289	-62.454	-4.948	-0.881	1.00	49.19
14405	O	TRP	C	289	-61.822	-5.794	-1.489	1.00	49.31
14406	N	LEU	C	290	-63.508	-5.238	-0.139	1.00	49.21
14407	CA	LEU	C	290	-63.944	-6.594	0.090	1.00	48.60
14408	CB	LEU	C	290	-64.100	-6.792	1.599	1.00	48.59
14409	CG	LEU	C	290	-63.826	-8.152	2.246	1.00	49.04
14410	CD1	LEU	C	290	-64.605	-8.255	3.553	1.00	47.77
14411	CD2	LEU	C	290	-64.197	-9.270	1.312	1.00	49.22
14412	C	LEU	C	290	-65.293	-6.758	-0.575	1.00	48.40
14413	O	LEU	C	290	-66.150	-5.885	-0.442	1.00	48.12
14414	N	ARG	C	291	-65.477	-7.860	-1.295	1.00	48.24
14415	CA	ARG	C	291	-66.765	-8.158	-1.896	1.00	49.00
14416	CB	ARG	C	291	-66.652	-9.306	-2.897	1.00	48.89
14417	CG	ARG	C	291	-66.392	-8.880	-4.335	1.00	49.44
14418	CD	ARG	C	291	-66.639	-10.001	-5.336	1.00	50.02
14419	NE	ARG	C	291	-66.123	-9.677	-6.661	1.00	50.57
14420	CZ	ARG	C	291	-65.444	-10.526	-7.417	1.00	50.24
14421	NH1	ARG	C	291	-65.011	-10.144	-8.609	1.00	51.60
14422	NH2	ARG	C	291	-65.196	-11.754	-6.981	1.00	48.39
14423	C	ARG	C	291	-67.718	-8.579	-0.797	1.00	49.32

FIGURE 3 JW

A	B	C	D	E	F	G	H	I	J
14424	O	ARG	C	291	-67.283	-9.066	0.248	1.00	49.42
14425	N	ARG	C	292	-69.017	-8.406	-1.026	1.00	49.72
14426	CA	ARG	C	292	-69.996	-8.832	-0.034	1.00	49.95
14427	CB	ARG	C	292	-71.424	-8.540	-0.471	1.00	49.71
14428	CG	ARG	C	292	-72.395	-8.432	0.704	1.00	50.13
14429	CD	ARG	C	292	-73.849	-8.224	0.297	1.00	50.49
14430	NE	ARG	C	292	-74.792	-8.583	1.355	1.00	50.03
14431	CZ	ARG	C	292	-75.740	-7.764	1.797	1.00	50.25
14432	NH1	ARG	C	292	-76.568	-8.146	2.758	1.00	49.95
14433	NH2	ARG	C	292	-75.862	-6.554	1.273	1.00	49.66
14434	C	ARG	C	292	-69.787	-10.311	0.214	1.00	50.22
14435	O	ARG	C	292	-69.910	-10.789	1.343	1.00	50.41
14436	N	ILE	C	293	-69.483	-11.052	-0.840	1.00	50.37
14437	CA	ILE	C	293	-69.056	-12.418	-0.612	1.00	51.22
14438	CB	ILE	C	293	-69.220	-13.291	-1.847	1.00	51.01
14439	CG1	ILE	C	293	-70.706	-13.390	-2.208	1.00	52.32
14440	CD1	ILE	C	293	-71.002	-14.244	-3.455	1.00	53.85
14441	CG2	ILE	C	293	-68.682	-14.666	-1.560	1.00	50.54
14442	C	ILE	C	293	-67.599	-12.232	-0.212	1.00	51.23
14443	O	ILE	C	293	-66.733	-12.001	-1.051	1.00	51.38
14444	N	GLN	C	294	-67.347	-12.302	1.087	1.00	51.66
14445	CA	GLN	C	294	-66.048	-11.932	1.639	1.00	51.94
14446	CB	GLN	C	294	-66.199	-11.628	3.134	1.00	51.50
14447	CG	GLN	C	294	-67.131	-10.461	3.407	1.00	50.67
14448	CD	GLN	C	294	-67.444	-10.269	4.878	1.00	50.57
14449	OE1	GLN	C	294	-66.543	-10.300	5.730	1.00	48.42
14450	NE2	GLN	C	294	-68.726	-10.060	5.183	1.00	50.20
14451	C	GLN	C	294	-64.920	-12.937	1.396	1.00	52.57
14452	O	GLN	C	294	-64.089	-13.160	2.275	1.00	52.39
14453	N	ASN	C	295	-64.884	-13.530	0.205	1.00	53.31
14454	CA	ASN	C	295	-63.834	-14.485	-0.145	1.00	54.10
14455	CB	ASN	C	295	-64.446	-15.774	-0.677	1.00	54.21
14456	CG	ASN	C	295	-65.217	-15.549	-1.949	1.00	55.01
14457	OD1	ASN	C	295	-65.245	-14.438	-2.475	1.00	54.76
14458	ND2	ASN	C	295	-65.857	-16.593	-2.449	1.00	59.35
14459	C	ASN	C	295	-62.904	-13.923	-1.211	1.00	54.26
14460	O	ASN	C	295	-62.172	-14.673	-1.856	1.00	54.15
14461	N	TYR	C	296	-62.943	-12.607	-1.394	1.00	54.51
14462	CA	TYR	C	296	-62.166	-11.957	-2.438	1.00	54.91
14463	CB	TYR	C	296	-62.951	-12.018	-3.744	1.00	54.96
14464	CG	TYR	C	296	-62.203	-11.583	-4.996	1.00	55.31
14465	CD1	TYR	C	296	-61.633	-12.525	-5.847	1.00	56.36
14466	CE1	TYR	C	296	-60.971	-12.145	-7.005	1.00	56.44
14467	CZ	TYR	C	296	-60.882	-10.808	-7.330	1.00	55.82
14468	OH	TYR	C	296	-60.226	-10.438	-8.480	1.00	55.06
14469	CE2	TYR	C	296	-61.452	-9.855	-6.509	1.00	55.37
14470	CD2	TYR	C	296	-62.113	-10.246	-5.353	1.00	54.88
14471	C	TYR	C	296	-61.914	-10.508	-2.088	1.00	55.31
14472	O	TYR	C	296	-62.845	-9.725	-1.961	1.00	55.31
14473	N	SER	C	297	-60.654	-10.143	-1.931	1.00	56.14
14474	CA	SER	C	297	-60.323	-8.759	-1.650	1.00	57.08



FIGURE 3 JX

A	B	C	D	E	F	G	H	I	J
14475	CB	SER	C	297	-59.656	-8.624	-0.284	1.00	56.99
14476	OG	SER	C	297	-58.256	-8.741	-0.402	1.00	57.32
14477	C	SER	C	297	-59.394	-8.250	-2.732	1.00	57.41
14478	O	SER	C	297	-58.746	-9.038	-3.407	1.00	57.69
14479	N	VAL	C	298	-59.348	-6.934	-2.903	1.00	58.11
14480	CA	VAL	C	298	-58.458	-6.313	-3.873	1.00	58.76
14481	CB	VAL	C	298	-59.208	-5.851	-5.134	1.00	58.70
14482	CG1	VAL	C	298	-59.782	-7.035	-5.887	1.00	58.20
14483	CG2	VAL	C	298	-58.272	-5.043	-6.032	1.00	58.65
14484	C	VAL	C	298	-57.790	-5.085	-3.273	1.00	59.55
14485	O	VAL	C	298	-58.458	-4.224	-2.692	1.00	59.52
14486	N	MET	C	299	-56.472	-4.996	-3.426	1.00	60.53
14487	CA	MET	C	299	-55.732	-3.841	-2.939	1.00	61.43
14488	CB	MET	C	299	-54.404	-4.265	-2.299	1.00	61.43
14489	CG	MET	C	299	-53.588	-3.093	-1.740	1.00	62.27
14490	SD	MET	C	299	-52.139	-3.591	-0.768	1.00	63.50
14491	CE	MET	C	299	-52.924	-4.583	0.481	1.00	63.92
14492	C	MET	C	299	-55.480	-2.849	-4.070	1.00	62.24
14493	O	MET	C	299	-55.001	-3.218	-5.142	1.00	62.05
14494	N	ASP	C	300	-55.823	-1.590	-3.828	1.00	63.35
14495	CA	ASP	C	300	-55.572	-0.526	-4.785	1.00	64.62
14496	CB	ASP	C	300	-56.854	0.233	-5.100	1.00	64.66
14497	CG	ASP	C	300	-57.238	0.136	-6.555	1.00	65.00
14498	OD1	ASP	C	300	-57.940	1.045	-7.043	1.00	65.37
14499	OD2	ASP	C	300	-56.880	-0.812	-7.283	1.00	65.18
14500	C	ASP	C	300	-54.534	0.461	-4.272	1.00	65.56
14501	O	ASP	C	300	-54.591	0.902	-3.128	1.00	65.55
14502	N	ILE	C	301	-53.586	0.814	-5.128	1.00	66.70
14503	CA	ILE	C	301	-52.578	1.792	-4.755	1.00	67.95
14504	CB	ILE	C	301	-51.176	1.182	-4.850	1.00	68.00
14505	CG1	ILE	C	301	-50.968	0.198	-3.694	1.00	68.09
14506	CD1	ILE	C	301	-50.287	-1.091	-4.094	1.00	68.21
14507	CG2	ILE	C	301	-50.120	2.275	-4.814	1.00	68.27
14508	C	ILE	C	301	-52.730	3.001	-5.657	1.00	68.62
14509	O	ILE	C	301	-52.661	2.890	-6.872	1.00	68.88
14510	N	CYS	C	302	-52.957	4.155	-5.052	1.00	69.66
14511	CA	CYS	C	302	-53.219	5.362	-5.809	1.00	70.78
14512	CB	CYS	C	302	-54.618	5.874	-5.474	1.00	71.02
14513	SG	CYS	C	302	-55.849	4.561	-5.295	1.00	72.11
14514	C	CYS	C	302	-52.193	6.446	-5.524	1.00	71.37
14515	O	CYS	C	302	-51.959	6.798	-4.371	1.00	71.38
14516	N	ASP	C	303	-51.586	6.973	-6.583	1.00	72.29
14517	CA	ASP	C	303	-50.606	8.043	-6.456	1.00	73.14
14518	CB	ASP	C	303	-49.437	7.831	-7.420	1.00	73.42
14519	CG	ASP	C	303	-48.692	6.532	-7.171	1.00	74.20
14520	OD1	ASP	C	303	-49.189	5.462	-7.587	1.00	75.36
14521	OD2	ASP	C	303	-47.590	6.490	-6.586	1.00	75.49
14522	C	ASP	C	303	-51.274	9.376	-6.760	1.00	73.50
14523	O	ASP	C	303	-52.187	9.448	-7.582	1.00	73.48
14524	N	TYR	C	304	-50.829	10.430	-6.090	1.00	74.11
14525	CA	TYR	C	304	-51.378	11.755	-6.342	1.00	74.88

FIGURE 3 JY

A	B	C	D	E	F	G	H	I	J
14526	CB	TYR	C	304	-51.098	12.695	-5.170	1.00	74.65
14527	CG	TYR	C	304	-51.672	14.089	-5.334	1.00	74.89
14528	CD1	TYR	C	304	-53.040	14.309	-5.278	1.00	75.03
14529	CE1	TYR	C	304	-53.572	15.579	-5.424	1.00	75.07
14530	CZ	TYR	C	304	-52.737	16.655	-5.624	1.00	75.03
14531	OH	TYR	C	304	-53.276	17.918	-5.765	1.00	74.20
14532	CE2	TYR	C	304	-51.369	16.468	-5.682	1.00	75.20
14533	CD2	TYR	C	304	-50.845	15.187	-5.537	1.00	75.32
14534	C	TYR	C	304	-50.756	12.318	-7.607	1.00	75.54
14535	O	TYR	C	304	-49.532	12.397	-7.725	1.00	75.44
14536	N	ASP	C	305	-51.602	12.694	-8.559	1.00	76.52
14537	CA	ASP	C	305	-51.126	13.292	-9.802	1.00	77.39
14538	CB	ASP	C	305	-52.033	12.904	-10.970	1.00	77.39
14539	CG	ASP	C	305	-51.512	13.404	-12.302	1.00	78.00
14540	OD1	ASP	C	305	-51.085	14.580	-12.374	1.00	77.50
14541	OD2	ASP	C	305	-51.492	12.688	-13.328	1.00	78.32
14542	C	ASP	C	305	-51.074	14.810	-9.641	1.00	77.83
14543	O	ASP	C	305	-52.108	15.483	-9.674	1.00	77.69
14544	N	GLU	C	306	-49.866	15.341	-9.460	1.00	78.37
14545	CA	GLU	C	306	-49.677	16.779	-9.271	1.00	79.01
14546	CB	GLU	C	306	-48.192	17.126	-9.151	1.00	79.19
14547	CG	GLU	C	306	-47.653	17.082	-7.734	1.00	80.36
14548	CD	GLU	C	306	-46.824	18.307	-7.408	1.00	82.35
14549	OE1	GLU	C	306	-45.628	18.334	-7.777	1.00	82.84
14550	OE2	GLU	C	306	-47.375	19.250	-6.794	1.00	82.87
14551	C	GLU	C	306	-50.306	17.627	-10.376	1.00	79.06
14552	O	GLU	C	306	-50.726	18.762	-10.134	1.00	78.86
14553	N	SER	C	307	-50.360	17.074	-11.585	1.00	79.18
14554	CA	SER	C	307	-50.917	17.786	-12.731	1.00	79.30
14555	CB	SER	C	307	-50.448	17.143	-14.041	1.00	79.47
14556	OG	SER	C	307	-51.240	16.008	-14.375	1.00	79.74
14557	C	SER	C	307	-52.439	17.793	-12.687	1.00	79.20
14558	O	SER	C	307	-53.067	18.852	-12.620	1.00	79.19
14559	N	SER	C	308	-53.020	16.597	-12.741	1.00	78.99
14560	CA	SER	C	308	-54.467	16.424	-12.713	1.00	78.74
14561	CB	SER	C	308	-54.816	14.933	-12.653	1.00	78.75
14562	OG	SER	C	308	-54.502	14.263	-13.860	1.00	79.19
14563	C	SER	C	308	-55.098	17.119	-11.513	1.00	78.50
14564	O	SER	C	308	-56.164	17.732	-11.624	1.00	78.44
14565	N	GLY	C	309	-54.418	17.034	-10.371	1.00	78.09
14566	CA	GLY	C	309	-54.973	17.502	-9.115	1.00	77.62
14567	C	GLY	C	309	-55.847	16.336	-8.694	1.00	77.27
14568	O	GLY	C	309	-56.798	16.474	-7.922	1.00	77.29
14569	N	ARG	C	310	-55.471	15.170	-9.215	1.00	76.75
14570	CA	ARG	C	310	-56.234	13.938	-9.097	1.00	76.29
14571	CB	ARG	C	310	-56.544	13.446	-10.510	1.00	76.67
14572	CG	ARG	C	310	-57.716	12.506	-10.657	1.00	77.82
14573	CD	ARG	C	310	-58.190	12.440	-12.089	1.00	80.25
14574	NE	ARG	C	310	-58.131	13.769	-12.695	1.00	81.85
14575	CZ	ARG	C	310	-58.417	14.032	-13.964	1.00	82.78
14576	NH1	ARG	C	310	-58.789	13.056	-14.783	1.00	83.05

FIGURE 3 JZ

A	B	C	D	E	F	G	H	I	J
14577	NH2	ARG	C	310	-58.331	15.278	-14.416	1.00	83.30
14578	C	ARG	C	310	-55.499	12.830	-8.350	1.00	75.51
14579	O	ARG	C	310	-54.401	13.028	-7.831	1.00	75.33
14580	N	TRP	C	311	-56.128	11.658	-8.324	1.00	74.65
14581	CA	TRP	C	311	-55.597	10.470	-7.673	1.00	73.84
14582	CB	TRP	C	311	-56.315	10.231	-6.345	1.00	73.24
14583	CG	TRP	C	311	-55.866	11.152	-5.275	1.00	70.69
14584	CD1	TRP	C	311	-56.414	12.352	-4.943	1.00	69.05
14585	NE1	TRP	C	311	-55.718	12.921	-3.905	1.00	67.69
14586	CE2	TRP	C	311	-54.691	12.087	-3.553	1.00	67.62
14587	CD2	TRP	C	311	-54.756	10.962	-4.399	1.00	68.33
14588	CE3	TRP	C	311	-53.808	9.949	-4.237	1.00	67.52
14589	CZ3	TRP	C	311	-52.842	10.091	-3.259	1.00	67.20
14590	CH2	TRP	C	311	-52.804	11.224	-2.435	1.00	66.27
14591	CZ2	TRP	C	311	-53.716	12.228	-2.565	1.00	66.28
14592	C	TRP	C	311	-55.791	9.263	-8.578	1.00	74.16
14593	O	TRP	C	311	-56.922	8.852	-8.834	1.00	74.25
14594	N	ASN	C	312	-54.694	8.682	-9.051	1.00	74.33
14595	CA	ASN	C	312	-54.797	7.543	-9.957	1.00	74.55
14596	CB	ASN	C	312	-54.113	7.859	-11.290	1.00	74.95
14597	CG	ASN	C	312	-54.852	8.918	-12.076	1.00	75.92
14598	OD1	ASN	C	312	-55.937	8.663	-12.611	1.00	77.19
14599	ND2	ASN	C	312	-54.282	10.121	-12.139	1.00	76.28
14600	C	ASN	C	312	-54.282	6.225	-9.398	1.00	74.28
14601	O	ASN	C	312	-53.158	6.140	-8.905	1.00	74.15
14602	N	CYS	C	313	-55.124	5.201	-9.485	1.00	74.00
14603	CA	CYS	C	313	-54.764	3.868	-9.035	1.00	73.85
14604	CB	CYS	C	313	-55.885	3.253	-8.189	1.00	73.88
14605	SG	CYS	C	313	-56.783	4.380	-7.095	1.00	73.03
14606	C	CYS	C	313	-54.536	3.006	-10.269	1.00	73.87
14607	O	CYS	C	313	-55.456	2.811	-11.064	1.00	73.94
14608	N	LEU	C	314	-53.317	2.497	-10.431	1.00	73.68
14609	CA	LEU	C	314	-52.974	1.682	-11.594	1.00	73.63
14610	CB	LEU	C	314	-51.464	1.691	-11.831	1.00	73.72
14611	CG	LEU	C	314	-50.863	2.884	-12.568	1.00	74.13
14612	CD1	LEU	C	314	-50.760	4.092	-11.651	1.00	74.86
14613	CD2	LEU	C	314	-51.679	3.202	-13.812	1.00	74.62
14614	C	LEU	C	314	-53.437	0.242	-11.454	1.00	73.50
14615	O	LEU	C	314	-53.186	-0.393	-10.433	1.00	73.75
14616	N	VAL	C	315	-54.096	-0.277	-12.487	1.00	73.13
14617	CA	VAL	C	315	-54.551	-1.662	-12.486	1.00	72.90
14618	CB	VAL	C	315	-55.179	-2.055	-13.840	1.00	72.97
14619	CG1	VAL	C	315	-55.332	-3.567	-13.946	1.00	73.14
14620	CG2	VAL	C	315	-56.518	-1.357	-14.039	1.00	73.14
14621	C	VAL	C	315	-53.383	-2.599	-12.204	1.00	72.68
14622	O	VAL	C	315	-53.522	-3.597	-11.489	1.00	72.80
14623	N	ALA	C	316	-52.228	-2.267	-12.771	1.00	72.27
14624	CA	ALA	C	316	-51.020	-3.067	-12.593	1.00	71.78
14625	CB	ALA	C	316	-49.902	-2.548	-13.490	1.00	71.86
14626	C	ALA	C	316	-50.570	-3.092	-11.131	1.00	71.30
14627	O	ALA	C	316	-49.776	-3.940	-10.730	1.00	71.34

FIGURE 3 KA

A	B	C	D	E	F	G	H	I	J
14628	N	ARG	C	317	-51.081	-2.159	-10.338	1.00	70.48
14629	CA	ARG	C	317	-50.722	-2.099	-8.931	1.00	69.90
14630	CB	ARG	C	317	-50.824	-0.668	-8.414	1.00	70.05
14631	CG	ARG	C	317	-50.086	0.350	-9.252	1.00	70.18
14632	CD	ARG	C	317	-48.609	0.430	-8.972	1.00	69.99
14633	NE	ARG	C	317	-48.159	1.815	-9.004	1.00	70.37
14634	CZ	ARG	C	317	-46.948	2.204	-9.370	1.00	70.67
14635	NH1	ARG	C	317	-46.641	3.496	-9.362	1.00	70.79
14636	NH2	ARG	C	317	-46.042	1.306	-9.739	1.00	70.73
14637	C	ARG	C	317	-51.642	-2.998	-8.115	1.00	69.33
14638	O	ARG	C	317	-51.354	-3.308	-6.954	1.00	69.23
14639	N	GLN	C	318	-52.752	-3.403	-8.729	1.00	68.24
14640	CA	GLN	C	318	-53.723	-4.252	-8.060	1.00	67.00
14641	CB	GLN	C	318	-54.900	-4.585	-8.981	1.00	66.95
14642	CG	GLN	C	318	-56.048	-3.608	-8.865	1.00	66.42
14643	CD	GLN	C	318	-57.239	-4.009	-9.693	1.00	65.40
14644	OE1	GLN	C	318	-58.024	-3.158	-10.102	1.00	65.29
14645	NE2	GLN	C	318	-57.378	-5.306	-9.948	1.00	64.83
14646	C	GLN	C	318	-53.088	-5.530	-7.571	1.00	66.38
14647	O	GLN	C	318	-52.285	-6.149	-8.272	1.00	66.39
14648	N	HIS	C	319	-53.443	-5.903	-6.349	1.00	65.28
14649	CA	HIS	C	319	-53.007	-7.156	-5.767	1.00	64.24
14650	CB	HIS	C	319	-52.045	-6.920	-4.600	1.00	64.22
14651	CG	HIS	C	319	-50.725	-6.343	-5.009	1.00	63.32
14652	ND1	HIS	C	319	-50.474	-4.987	-5.018	1.00	62.54
14653	CE1	HIS	C	319	-49.234	-4.772	-5.420	1.00	62.04
14654	NE2	HIS	C	319	-48.672	-5.940	-5.674	1.00	62.83
14655	CD2	HIS	C	319	-49.582	-6.939	-5.424	1.00	62.88
14656	C	HIS	C	319	-54.268	-7.851	-5.296	1.00	63.78
14657	O	HIS	C	319	-55.200	-7.210	-4.804	1.00	63.69
14658	N	ILE	C	320	-54.311	-9.163	-5.442	1.00	63.04
14659	CA	ILE	C	320	-55.508	-9.884	-5.066	1.00	62.66
14660	CB	ILE	C	320	-56.010	-10.737	-6.250	1.00	62.59
14661	CG1	ILE	C	320	-56.427	-9.832	-7.410	1.00	62.72
14662	CD1	ILE	C	320	-56.905	-10.589	-8.650	1.00	62.92
14663	CG2	ILE	C	320	-57.159	-11.635	-5.814	1.00	62.38
14664	C	ILE	C	320	-55.307	-10.760	-3.843	1.00	62.36
14665	O	ILE	C	320	-54.356	-11.543	-3.776	1.00	62.58
14666	N	GLU	C	321	-56.191	-10.607	-2.866	1.00	61.71
14667	CA	GLU	C	321	-56.195	-11.502	-1.723	1.00	61.58
14668	CB	GLU	C	321	-56.042	-10.754	-0.400	1.00	61.42
14669	CG	GLU	C	321	-55.740	-11.662	0.786	1.00	61.79
14670	CD	GLU	C	321	-55.353	-10.882	2.033	1.00	62.23
14671	OE1	GLU	C	321	-54.974	-9.696	1.902	1.00	61.08
14672	OE2	GLU	C	321	-55.421	-11.465	3.143	1.00	62.69
14673	C	GLU	C	321	-57.514	-12.261	-1.793	1.00	61.44
14674	O	GLU	C	321	-58.592	-11.661	-1.816	1.00	61.59
14675	N	MET	C	322	-57.425	-13.583	-1.839	1.00	60.93
14676	CA	MET	C	322	-58.609	-14.408	-2.000	1.00	60.65
14677	CB	MET	C	322	-58.808	-14.696	-3.488	1.00	60.72
14678	CG	MET	C	322	-59.663	-15.880	-3.816	1.00	61.69

FIGURE 3 KB

A	B	C	D	E	F	G	H	I	J
14679	SD	MET	C	322	-59.103	-16.592	-5.370	1.00	65.83
14680	CE	MET	C	322	-58.571	-15.104	-6.250	1.00	64.68
14681	C	MET	C	322	-58.472	-15.702	-1.204	1.00	60.20
14682	O	MET	C	322	-57.398	-16.007	-0.685	1.00	60.11
14683	N	SER	C	323	-59.567	-16.450	-1.105	1.00	59.52
14684	CA	SER	C	323	-59.584	-17.701	-0.374	1.00	58.94
14685	CB	SER	C	323	-59.984	-17.455	1.080	1.00	58.92
14686	OG	SER	C	323	-59.899	-18.644	1.845	1.00	59.19
14687	C	SER	C	323	-60.575	-18.632	-1.048	1.00	58.47
14688	O	SER	C	323	-61.602	-18.189	-1.536	1.00	58.18
14689	N	THR	C	324	-60.267	-19.921	-1.067	1.00	58.22
14690	CA	THR	C	324	-61.105	-20.903	-1.749	1.00	58.08
14691	CB	THR	C	324	-60.265	-21.616	-2.823	1.00	58.38
14692	OG1	THR	C	324	-59.069	-22.130	-2.223	1.00	58.37
14693	CG2	THR	C	324	-59.725	-20.599	-3.832	1.00	57.98
14694	C	THR	C	324	-61.706	-21.929	-0.788	1.00	57.73
14695	O	THR	C	324	-62.491	-22.789	-1.187	1.00	58.01
14696	N	THR	C	325	-61.315	-21.830	0.479	1.00	57.33
14697	CA	THR	C	325	-61.807	-22.697	1.536	1.00	56.80
14698	CB	THR	C	325	-60.625	-23.225	2.364	1.00	56.93
14699	OG1	THR	C	325	-59.795	-22.120	2.753	1.00	56.79
14700	CG2	THR	C	325	-59.701	-24.066	1.499	1.00	57.13
14701	C	THR	C	325	-62.741	-21.882	2.434	1.00	56.16
14702	O	THR	C	325	-63.568	-22.450	3.148	1.00	56.08
14703	N	GLY	C	326	-62.614	-20.556	2.400	1.00	55.15
14704	CA	GLY	C	326	-63.452	-19.713	3.233	1.00	54.06
14705	C	GLY	C	326	-63.409	-18.222	2.951	1.00	53.15
14706	O	GLY	C	326	-63.574	-17.767	1.815	1.00	53.35
14707	N	TRP	C	327	-63.191	-17.449	4.001	1.00	51.92
14708	CA	TRP	C	327	-63.186	-16.005	3.863	1.00	50.85
14709	CB	TRP	C	327	-63.990	-15.366	4.993	1.00	50.43
14710	CG	TRP	C	327	-63.464	-15.641	6.357	1.00	47.77
14711	CD1	TRP	C	327	-62.665	-14.831	7.097	1.00	46.59
14712	NE1	TRP	C	327	-62.401	-15.406	8.318	1.00	46.11
14713	CE2	TRP	C	327	-63.038	-16.615	8.381	1.00	46.40
14714	CD2	TRP	C	327	-63.724	-16.790	7.164	1.00	45.95
14715	CE3	TRP	C	327	-64.469	-17.954	6.984	1.00	45.56
14716	CE3	TRP	C	327	-64.503	-18.887	7.996	1.00	45.26
14717	CH2	TRP	C	327	-63.806	-18.688	9.192	1.00	46.26
14718	CE2	TRP	C	327	-63.072	-17.560	9.406	1.00	46.57
14719	C	TRP	C	327	-61.775	-15.463	3.840	1.00	50.69
14720	O	TRP	C	327	-60.816	-16.207	4.030	1.00	51.11
14721	N	VAL	C	328	-61.640	-14.164	3.628	1.00	50.50
14722	CA	VAL	C	328	-60.314	-13.580	3.535	1.00	50.67
14723	CB	VAL	C	328	-60.181	-12.646	2.309	1.00	50.76
14724	CG1	VAL	C	328	-61.431	-11.816	2.136	1.00	51.20
14725	CG2	VAL	C	328	-58.935	-11.786	2.422	1.00	50.20
14726	C	VAL	C	328	-59.895	-12.853	4.796	1.00	50.73
14727	O	VAL	C	328	-60.503	-11.853	5.188	1.00	51.04
14728	N	GLY	C	329	-58.834	-13.359	5.420	1.00	50.69
14729	CA	GLY	C	329	-58.316	-12.780	6.647	1.00	50.34

FIGURE 3 KC

A	B	C	D	E	F	G	H	I	J
14730	C	GLY	C	329	-58.965	-13.429	7.851	1.00	50.30
14731	O	GLY	C	329	-59.818	-14.303	7.716	1.00	49.99
14732	N	ARG	C	330	-58.554	-13.019	9.038	1.00	50.33
14733	CA	ARG	C	330	-59.147	-13.577	10.237	1.00	50.67
14734	CB	ARG	C	330	-58.247	-13.335	11.448	1.00	50.93
14735	CG	ARG	C	330	-56.997	-14.226	11.391	1.00	51.71
14736	CD	ARG	C	330	-56.341	-14.515	12.738	1.00	52.29
14737	NE	ARG	C	330	-55.139	-13.724	12.905	1.00	53.20
14738	CZ	ARG	C	330	-53.919	-14.186	12.697	1.00	52.11
14739	NH1	ARG	C	330	-52.879	-13.381	12.851	1.00	51.07
14740	NH2	ARG	C	330	-53.744	-15.450	12.338	1.00	51.36
14741	C	ARG	C	330	-60.551	-13.016	10.407	1.00	50.42
14742	O	ARG	C	330	-61.517	-13.770	10.488	1.00	50.23
14743	N	PHE	C	331	-60.666	-11.693	10.431	1.00	50.29
14744	CA	PHE	C	331	-61.981	-11.060	10.452	1.00	50.57
14745	CB	PHE	C	331	-62.243	-10.347	11.779	1.00	50.22
14746	CG	PHE	C	331	-62.313	-11.282	12.953	1.00	50.45
14747	CD1	PHE	C	331	-63.487	-11.959	13.248	1.00	50.48
14748	CE1	PHE	C	331	-63.551	-12.834	14.314	1.00	50.64
14749	CZ	PHE	C	331	-62.434	-13.042	15.099	1.00	51.01
14750	CE2	PHE	C	331	-61.253	-12.374	14.809	1.00	50.31
14751	CD2	PHE	C	331	-61.198	-11.507	13.741	1.00	49.57
14752	C	PHE	C	331	-62.082	-10.119	9.252	1.00	51.11
14753	O	PHE	C	331	-63.177	-9.807	8.779	1.00	50.96
14754	N	ARG	C	332	-60.917	-9.698	8.761	1.00	51.50
14755	CA	ARG	C	332	-60.807	-8.871	7.567	1.00	52.05
14756	CB	ARG	C	332	-61.194	-7.413	7.853	1.00	52.13
14757	CG	ARG	C	332	-60.272	-6.643	8.791	1.00	53.45
14758	CD	ARG	C	332	-61.021	-5.621	9.644	1.00	56.29
14759	NE	ARG	C	332	-62.130	-6.284	10.342	1.00	58.60
14760	CZ	ARG	C	332	-62.363	-6.215	11.651	1.00	58.73
14761	NH1	ARG	C	332	-61.596	-5.477	12.438	1.00	58.14
14762	NH2	ARG	C	332	-63.385	-6.879	12.172	1.00	59.72
14763	C	ARG	C	332	-59.394	-8.957	6.980	1.00	52.20
14764	O	ARG	C	332	-58.442	-9.343	7.668	1.00	51.62
14765	N	PRO	C	333	-59.277	-8.651	5.690	1.00	52.39
14766	CA	PRO	C	333	-57.977	-8.575	5.020	1.00	52.50
14767	CB	PRO	C	333	-58.293	-7.762	3.772	1.00	52.48
14768	CG	PRO	C	333	-59.696	-8.168	3.439	1.00	52.79
14769	CD	PRO	C	333	-60.394	-8.407	4.762	1.00	52.36
14770	C	PRO	C	333	-56.990	-7.822	5.889	1.00	52.82
14771	O	PRO	C	333	-57.359	-6.809	6.497	1.00	52.91
14772	N	SER	C	334	-55.754	-8.306	5.944	1.00	52.91
14773	CA	SER	C	334	-54.743	-7.715	6.808	1.00	53.30
14774	CB	SER	C	334	-53.532	-8.646	6.917	1.00	53.34
14775	OG	SER	C	334	-52.712	-8.294	8.018	1.00	54.15
14776	C	SER	C	334	-54.324	-6.342	6.302	1.00	53.54
14777	O	SER	C	334	-54.462	-6.046	5.117	1.00	53.24
14778	N	GLU	C	335	-53.840	-5.497	7.209	1.00	53.95
14779	CA	GLU	C	335	-53.382	-4.169	6.832	1.00	54.84
14780	CB	GLU	C	335	-53.582	-3.161	7.970	1.00	54.79

FIGURE 3 KD

A	B	C	D	E	F	G	H	I	J
14781	CG	GLU	C	335	-52.526	-3.173	9.074	1.00	55.64
14782	CD	GLU	C	335	-52.545	-4.432	9.939	1.00	56.05
14783	OE1	GLU	C	335	-53.529	-5.203	9.903	1.00	55.12
14784	OE2	GLU	C	335	-51.556	-4.649	10.664	1.00	57.44
14785	C	GLU	C	335	-51.921	-4.248	6.400	1.00	55.51
14786	O	GLU	C	335	-51.161	-5.072	6.915	1.00	55.48
14787	N	PRO	C	336	-51.542	-3.410	5.435	1.00	56.22
14788	CA	PRO	C	336	-50.186	-3.396	4.879	1.00	56.76
14789	CB	PRO	C	336	-50.443	-2.846	3.488	1.00	56.76
14790	CG	PRO	C	336	-51.425	-1.743	3.801	1.00	56.17
14791	CD	PRO	C	336	-52.401	-2.421	4.755	1.00	56.21
14792	C	PRO	C	336	-49.246	-2.436	5.600	1.00	57.44
14793	O	PRO	C	336	-49.669	-1.389	6.103	1.00	57.27
14794	N	HIS	C	337	-47.968	-2.787	5.640	1.00	58.37
14795	CA	HIS	C	337	-46.973	-1.896	6.234	1.00	59.44
14796	CB	HIS	C	337	-46.302	-2.541	7.440	1.00	59.29
14797	CG	HIS	C	337	-47.224	-2.719	8.601	1.00	60.00
14798	ND1	HIS	C	337	-48.054	-3.812	8.730	1.00	60.63
14799	CE1	HIS	C	337	-48.759	-3.694	9.840	1.00	61.42
14800	NE2	HIS	C	337	-48.422	-2.560	10.431	1.00	61.34
14801	CD2	HIS	C	337	-47.470	-1.928	9.671	1.00	60.58
14802	C	HIS	C	337	-45.961	-1.515	5.175	1.00	59.88
14803	O	HIS	C	337	-45.146	-2.336	4.760	1.00	59.79
14804	N	PHE	C	338	-46.031	-0.264	4.741	1.00	60.83
14805	CA	PHE	C	338	-45.199	0.224	3.647	1.00	61.83
14806	CB	PHE	C	338	-45.886	1.403	2.963	1.00	61.84
14807	CG	PHE	C	338	-47.182	1.041	2.305	1.00	62.19
14808	CD1	PHE	C	338	-48.387	1.244	2.957	1.00	61.45
14809	CE1	PHE	C	338	-49.576	0.907	2.350	1.00	62.03
14810	CZ	PHE	C	338	-49.572	0.333	1.087	1.00	62.44
14811	CE2	PHE	C	338	-48.381	0.124	0.430	1.00	63.09
14812	CD2	PHE	C	338	-47.194	0.477	1.039	1.00	63.13
14813	C	PHE	C	338	-43.792	0.629	4.046	1.00	62.61
14814	O	PHE	C	338	-43.585	1.302	5.059	1.00	62.69
14815	N	THR	C	339	-42.822	0.202	3.243	1.00	63.56
14816	CA	THR	C	339	-41.450	0.643	3.429	1.00	64.18
14817	CB	THR	C	339	-40.504	-0.087	2.470	1.00	64.13
14818	OG1	THR	C	339	-40.739	0.365	1.128	1.00	64.53
14819	CG2	THR	C	339	-40.841	-1.555	2.422	1.00	64.14
14820	C	THR	C	339	-41.465	2.125	3.104	1.00	64.46
14821	O	THR	C	339	-42.241	2.569	2.261	1.00	64.54
14822	N	LEU	C	340	-40.601	2.875	3.770	1.00	65.17
14823	CA	LEU	C	340	-40.517	4.324	3.625	1.00	65.83
14824	CB	LEU	C	340	-39.205	4.826	4.230	1.00	66.16
14825	CG	LEU	C	340	-38.916	6.328	4.240	1.00	66.50
14826	CD1	LEU	C	340	-40.027	7.111	4.935	1.00	67.20
14827	CD2	LEU	C	340	-37.580	6.568	4.927	1.00	67.69
14828	C	LEU	C	340	-40.674	4.872	2.209	1.00	66.08
14829	O	LEU	C	340	-41.340	5.889	2.016	1.00	66.20
14830	N	ASP	C	341	-40.063	4.226	1.220	1.00	66.47
14831	CA	ASP	C	341	-40.159	4.747	-0.142	1.00	66.83

FIGURE 3 KE

A	B	C	D	E	F	G	H	I	J
14832	CB	ASP	C	341	-39.072	4.165	-1.050	1.00	66.88
14833	CG	ASP	C	341	-39.254	2.686	-1.306	1.00	67.29
14834	OD1	ASP	C	341	-38.389	2.086	-1.981	1.00	67.46
14835	OD2	ASP	C	341	-40.232	2.041	-0.879	1.00	68.13
14836	C	ASP	C	341	-41.567	4.540	-0.709	1.00	67.00
14837	O	ASP	C	341	-42.017	5.279	-1.590	1.00	66.86
14838	N	GLY	C	342	-42.255	3.531	-0.180	1.00	67.15
14839	CA	GLY	C	342	-43.631	3.242	-0.546	1.00	67.47
14840	C	GLY	C	342	-43.832	2.363	-1.766	1.00	67.62
14841	O	GLY	C	342	-44.958	2.186	-2.228	1.00	67.62
14842	N	ASN	C	343	-42.750	1.812	-2.297	1.00	67.70
14843	CA	ASN	C	343	-42.856	0.967	-3.476	1.00	67.94
14844	CB	ASN	C	343	-41.730	1.290	-4.451	1.00	68.36
14845	CG	ASN	C	343	-41.353	2.761	-4.424	1.00	69.30
14846	OD1	ASN	C	343	-42.196	3.639	-4.640	1.00	70.24
14847	ND2	ASN	C	343	-40.088	3.039	-4.136	1.00	69.74
14848	C	ASN	C	343	-42.834	-0.497	-3.073	1.00	67.71
14849	O	ASN	C	343	-42.850	-1.399	-3.915	1.00	67.91
14850	N	SER	C	344	-42.807	-0.718	-1.765	1.00	67.27
14851	CA	SER	C	344	-42.812	-2.054	-1.198	1.00	66.98
14852	CB	SER	C	344	-41.386	-2.493	-0.882	1.00	67.02
14853	OG	SER	C	344	-41.383	-3.483	0.127	1.00	66.88
14854	C	SER	C	344	-43.647	-2.057	0.075	1.00	66.84
14855	O	SER	C	344	-43.882	-1.004	0.671	1.00	66.80
14856	N	PHE	C	345	-44.101	-3.236	0.490	1.00	66.62
14857	CA	PHE	C	345	-44.883	-3.348	1.718	1.00	66.60
14858	CB	PHE	C	345	-46.257	-2.682	1.565	1.00	66.55
14859	CG	PHE	C	345	-47.204	-3.421	0.659	1.00	66.13
14860	CD1	PHE	C	345	-47.889	-4.536	1.105	1.00	66.16
14861	CE1	PHE	C	345	-48.764	-5.209	0.276	1.00	65.55
14862	CZ	PHE	C	345	-48.974	-4.764	-1.008	1.00	65.27
14863	CE2	PHE	C	345	-48.308	-3.650	-1.464	1.00	66.07
14864	CD2	PHE	C	345	-47.431	-2.979	-0.630	1.00	66.28
14865	C	PHE	C	345	-45.040	-4.789	2.181	1.00	66.56
14866	O	PHE	C	345	-44.968	-5.718	1.379	1.00	66.80
14867	N	TYR	C	346	-45.255	-4.968	3.481	1.00	66.39
14868	CA	TYR	C	346	-45.433	-6.298	4.058	1.00	66.27
14869	CB	TYR	C	346	-44.439	-6.540	5.199	1.00	66.30
14870	CG	TYR	C	346	-42.979	-6.360	4.849	1.00	66.10
14871	CD1	TYR	C	346	-42.160	-7.457	4.635	1.00	66.33
14872	CE1	TYR	C	346	-40.823	-7.298	4.328	1.00	66.82
14873	CZ	TYR	C	346	-40.286	-6.030	4.237	1.00	66.97
14874	OH	TYR	C	346	-38.949	-5.870	3.920	1.00	67.38
14875	CE2	TYR	C	346	-41.082	-4.925	4.449	1.00	66.61
14876	CD2	TYR	C	346	-42.416	-5.095	4.758	1.00	65.95
14877	C	TYR	C	346	-46.841	-6.438	4.621	1.00	66.27
14878	O	TYR	C	346	-47.456	-5.446	5.031	1.00	66.28
14879	N	LYS	C	347	-47.342	-7.671	4.655	1.00	66.10
14880	CA	LYS	C	347	-48.659	-7.939	5.220	1.00	66.03
14881	CB	LYS	C	347	-49.759	-7.368	4.327	1.00	66.14
14882	CG	LYS	C	347	-50.027	-8.200	3.100	1.00	66.48



FIGURE 3 KF

A	B	C	D	E	F	G	H	I	J
14883	CD	LYS	C	347	-51.517	-8.351	2.866	1.00	66.66
14884	CE	LYS	C	347	-52.218	-7.008	2.779	1.00	67.11
14885	NZ	LYS	C	347	-53.687	-7.213	2.633	1.00	67.50
14886	C	LYS	C	347	-48.909	-9.430	5.453	1.00	65.79
14887	O	LYS	C	347	-48.432	-10.277	4.695	1.00	65.82
14888	N	ILE	C	348	-49.670	-9.738	6.502	1.00	65.44
14889	CA	ILE	C	348	-49.997	-11.118	6.842	1.00	65.31
14890	CB	ILE	C	348	-50.481	-11.223	8.312	1.00	65.30
14891	CG1	ILE	C	348	-49.332	-10.980	9.297	1.00	65.22
14892	CD1	ILE	C	348	-49.331	-9.614	9.940	1.00	64.91
14893	CG2	ILE	C	348	-51.115	-12.582	8.564	1.00	64.62
14894	C	ILE	C	348	-51.073	-11.684	5.924	1.00	65.15
14895	O	ILE	C	348	-52.147	-11.109	5.797	1.00	65.21
14896	N	ILE	C	349	-50.777	-12.809	5.282	1.00	65.19
14897	CA	ILE	C	349	-51.745	-13.496	4.432	1.00	65.26
14898	CB	ILE	C	349	-51.525	-13.182	2.943	1.00	65.13
14899	CG1	ILE	C	349	-50.110	-13.564	2.511	1.00	64.92
14900	CD1	ILE	C	349	-49.995	-13.839	1.030	1.00	64.34
14901	CG2	ILE	C	349	-51.805	-11.750	2.646	1.00	65.13
14902	C	ILE	C	349	-51.612	-14.993	4.617	1.00	65.53
14903	O	ILE	C	349	-50.617	-15.467	5.153	1.00	65.52
14904	N	SER	C	350	-52.609	-15.739	4.152	1.00	66.02
14905	CA	SER	C	350	-52.567	-17.192	4.247	1.00	66.59
14906	CB	SER	C	350	-53.958	-17.790	4.044	1.00	66.61
14907	OG	SER	C	350	-53.891	-19.204	3.976	1.00	66.59
14908	C	SER	C	350	-51.607	-17.742	3.200	1.00	67.03
14909	O	SER	C	350	-51.184	-17.017	2.298	1.00	67.24
14910	N	ASN	C	351	-51.260	-19.020	3.316	1.00	67.27
14911	CA	ASN	C	351	-50.343	-19.628	2.357	1.00	67.38
14912	CB	ASN	C	351	-48.954	-19.826	2.973	1.00	67.28
14913	CG	ASN	C	351	-48.891	-21.010	3.909	1.00	66.52
14914	OD1	ASN	C	351	-49.590	-21.999	3.721	1.00	65.01
14915	ND2	ASN	C	351	-48.031	-20.921	4.916	1.00	66.38
14916	C	ASN	C	351	-50.873	-20.921	1.748	1.00	67.65
14917	O	ASN	C	351	-52.049	-21.252	1.898	1.00	67.66
14918	N	GLU	C	352	-49.997	-21.641	1.057	1.00	68.00
14919	CA	GLU	C	352	-50.377	-22.875	0.396	1.00	68.26
14920	CB	GLU	C	352	-49.253	-23.357	-0.532	1.00	68.64
14921	CG	GLU	C	352	-48.040	-23.953	0.176	1.00	69.60
14922	CD	GLU	C	352	-47.205	-22.926	0.922	1.00	70.82
14923	OE1	GLU	C	352	-46.343	-23.349	1.723	1.00	71.80
14924	OE2	GLU	C	352	-47.402	-21.706	0.709	1.00	70.61
14925	C	GLU	C	352	-50.722	-23.930	1.430	1.00	68.05
14926	O	GLU	C	352	-51.538	-24.812	1.170	1.00	68.26
14927	N	GLU	C	353	-50.106	-23.840	2.606	1.00	67.86
14928	CA	GLU	C	353	-50.360	-24.809	3.672	1.00	67.65
14929	CB	GLU	C	353	-49.065	-25.161	4.419	1.00	67.87
14930	CG	GLU	C	353	-48.117	-26.062	3.634	1.00	68.50
14931	CD	GLU	C	353	-48.356	-27.542	3.892	1.00	69.62
14932	OE1	GLU	C	353	-47.364	-28.307	3.971	1.00	69.66
14933	OE2	GLU	C	353	-49.534	-27.942	4.023	1.00	69.65

FIGURE 3 KG

A	B	C	D	E	F	G	H	I	J
14934	C	GLU	C	353	-51.422	-24.278	4.629	1.00	67.08
14935	O	GLU	C	353	-51.915	-25.003	5.492	1.00	66.87
14936	N	GLY	C	354	-51.753	-22.998	4.472	1.00	66.52
14937	CA	GLY	C	354	-52.818	-22.375	5.232	1.00	65.69
14938	C	GLY	C	354	-52.420	-21.564	6.444	1.00	65.14
14939	O	GLY	C	354	-53.274	-21.089	7.185	1.00	65.63
14940	N	TYR	C	355	-51.134	-21.383	6.668	1.00	64.36
14941	CA	TYR	C	355	-50.734	-20.623	7.839	1.00	63.70
14942	CB	TYR	C	355	-49.549	-21.285	8.541	1.00	63.55
14943	CG	TYR	C	355	-49.924	-22.646	9.084	1.00	63.58
14944	CD1	TYR	C	355	-50.245	-23.688	8.226	1.00	62.90
14945	CE1	TYR	C	355	-50.602	-24.928	8.708	1.00	63.30
14946	CZ	TYR	C	355	-50.652	-25.142	10.066	1.00	63.76
14947	OH	TYR	C	355	-51.011	-26.383	10.549	1.00	64.11
14948	CE2	TYR	C	355	-50.347	-24.121	10.941	1.00	63.99
14949	CD2	TYR	C	355	-49.990	-22.880	10.449	1.00	63.60
14950	C	TYR	C	355	-50.472	-19.184	7.462	1.00	63.29
14951	O	TYR	C	355	-50.000	-18.895	6.368	1.00	63.27
14952	N	ARG	C	356	-50.803	-18.276	8.367	1.00	62.80
14953	CA	ARG	C	356	-50.681	-16.860	8.069	1.00	62.47
14954	CB	ARG	C	356	-51.798	-16.077	8.766	1.00	62.13
14955	CG	ARG	C	356	-53.127	-16.782	8.586	1.00	60.75
14956	CD	ARG	C	356	-54.368	-16.005	8.951	1.00	57.23
14957	NE	ARG	C	356	-55.511	-16.694	8.369	1.00	55.24
14958	CZ	ARG	C	356	-56.241	-16.218	7.374	1.00	53.37
14959	NH1	ARG	C	356	-55.978	-15.012	6.864	1.00	50.50
14960	NH2	ARG	C	356	-57.245	-16.944	6.898	1.00	51.24
14961	C	ARG	C	356	-49.292	-16.334	8.392	1.00	62.56
14962	O	ARG	C	356	-48.883	-16.250	9.556	1.00	62.37
14963	N	HIS	C	357	-48.562	-15.997	7.337	1.00	62.62
14964	CA	HIS	C	357	-47.199	-15.524	7.496	1.00	62.90
14965	CB	HIS	C	357	-46.203	-16.576	7.013	1.00	62.31
14966	CG	HIS	C	357	-46.150	-17.783	7.892	1.00	60.17
14967	ND1	HIS	C	357	-45.494	-17.787	9.103	1.00	58.55
14968	CE1	HIS	C	357	-45.627	-18.972	9.670	1.00	58.54
14969	NE2	HIS	C	357	-46.349	-19.737	8.870	1.00	58.37
14970	CD2	HIS	C	357	-46.696	-19.013	7.755	1.00	58.71
14971	C	HIS	C	357	-46.980	-14.201	6.801	1.00	63.76
14972	O	HIS	C	357	-47.716	-13.837	5.879	1.00	63.54
14973	N	ILE	C	358	-45.979	-13.471	7.275	1.00	64.84
14974	CA	ILE	C	358	-45.676	-12.179	6.702	1.00	66.26
14975	CB	ILE	C	358	-44.607	-11.448	7.517	1.00	65.95
14976	CG1	ILE	C	358	-45.120	-11.189	8.933	1.00	66.20
14977	CD1	ILE	C	358	-44.100	-10.576	9.867	1.00	65.33
14978	CG2	ILE	C	358	-44.247	-10.138	6.841	1.00	65.73
14979	C	ILE	C	358	-45.210	-12.369	5.275	1.00	67.47
14980	O	ILE	C	358	-44.450	-13.288	4.967	1.00	67.57
14981	N	CYS	C	359	-45.693	-11.516	4.389	1.00	69.11
14982	CA	CYS	C	359	-45.241	-11.591	3.023	1.00	70.84
14983	CB	CYS	C	359	-46.330	-12.095	2.103	1.00	70.96
14984	SG	CYS	C	359	-45.668	-12.166	0.445	1.00	73.62

FIGURE 3 KH

A	B	C	D	E	F	G	H	I	J
14985	C	CYS	C	359	-44.700	-10.266	2.513	1.00	71.46
14986	O	CYS	C	359	-45.218	-9.198	2.842	1.00	71.59
14987	N	TYR	C	360	-43.646	-10.354	1.710	1.00	72.46
14988	CA	TYR	C	360	-43.033	-9.181	1.115	1.00	73.46
14989	CB	TYR	C	360	-41.522	-9.371	0.985	1.00	73.67
14990	CG	TYR	C	360	-40.782	-8.135	0.549	1.00	74.14
14991	CD1	TYR	C	360	-40.284	-8.016	-0.741	1.00	74.81
14992	CE1	TYR	C	360	-39.606	-6.882	-1.137	1.00	75.14
14993	CZ	TYR	C	360	-39.419	-5.847	-0.238	1.00	75.23
14994	OH	TYR	C	360	-38.745	-4.711	-0.622	1.00	75.50
14995	CE2	TYR	C	360	-39.905	-5.944	1.044	1.00	75.19
14996	CD2	TYR	C	360	-40.580	-7.088	1.429	1.00	74.65
14997	C	TYR	C	360	-43.653	-8.940	-0.250	1.00	74.04
14998	O	TYR	C	360	-43.665	-9.823	-1.114	1.00	74.02
14999	N	PHE	C	361	-44.186	-7.738	-0.424	1.00	74.72
15000	CA	PHE	C	361	-44.819	-7.341	-1.666	1.00	75.53
15001	CB	PHE	C	361	-46.286	-6.970	-1.414	1.00	75.32
15002	CG	PHE	C	361	-47.231	-8.146	-1.357	1.00	75.18
15003	CD1	PHE	C	361	-47.857	-8.607	-2.504	1.00	75.00
15004	CE1	PHE	C	361	-48.736	-9.679	-2.457	1.00	74.71
15005	CZ	PHE	C	361	-49.011	-10.289	-1.254	1.00	74.46
15006	CE2	PHE	C	361	-48.404	-9.833	-0.099	1.00	75.01
15007	CD2	PHE	C	361	-47.524	-8.762	-0.153	1.00	74.85
15008	C	PHE	C	361	-44.108	-6.110	-2.215	1.00	76.21
15009	O	PHE	C	361	-43.591	-5.292	-1.459	1.00	76.39
15010	N	GLN	C	362	-44.073	-5.985	-3.534	1.00	77.02
15011	CA	GLN	C	362	-43.550	-4.778	-4.155	1.00	77.85
15012	CB	GLN	C	362	-42.231	-5.034	-4.883	1.00	78.01
15013	CG	GLN	C	362	-41.033	-4.401	-4.179	1.00	78.37
15014	CD	GLN	C	362	-39.840	-5.335	-4.085	1.00	78.51
15015	OE1	GLN	C	362	-38.808	-4.970	-3.523	1.00	79.17
15016	NE2	GLN	C	362	-39.984	-6.545	-4.616	1.00	78.28
15017	C	GLN	C	362	-44.596	-4.185	-5.081	1.00	78.28
15018	O	GLN	C	362	-45.181	-4.883	-5.908	1.00	78.29
15019	N	ILE	C	363	-44.827	-2.891	-4.914	1.00	78.94
15020	CA	ILE	C	363	-45.822	-2.141	-5.675	1.00	79.80
15021	CB	ILE	C	363	-45.522	-0.624	-5.530	1.00	79.78
15022	CG1	ILE	C	363	-45.905	-0.145	-4.130	1.00	79.68
15023	CD1	ILE	C	363	-47.258	-0.584	-3.695	1.00	79.04
15024	CG2	ILE	C	363	-46.248	0.197	-6.569	1.00	79.98
15025	C	ILE	C	363	-46.005	-2.533	-7.156	1.00	80.30
15026	O	ILE	C	363	-46.978	-2.126	-7.782	1.00	80.38
15027	N	ASP	C	364	-45.110	-3.345	-7.710	1.00	80.94
15028	CA	ASP	C	364	-45.197	-3.666	-9.136	1.00	81.68
15029	CB	ASP	C	364	-43.931	-3.201	-9.857	1.00	81.66
15030	CG	ASP	C	364	-44.057	-1.795	-10.395	1.00	82.02
15031	OD1	ASP	C	364	-44.820	-1.609	-11.370	1.00	82.04
15032	OD2	ASP	C	364	-43.440	-0.819	-9.911	1.00	81.88
15033	C	ASP	C	364	-45.495	-5.109	-9.540	1.00	82.16
15034	O	ASP	C	364	-46.036	-5.344	-10.623	1.00	82.07
15035	N	LYS	C	365	-45.148	-6.072	-8.690	1.00	82.73

FIGURE 3 KI

A	B	C	D	E	F	G	H	I	J
15036	CA	LYS	C	365	-45.289	-7.479	-9.065	1.00	83.29
15037	CB	LYS	C	365	-43.984	-8.227	-8.806	1.00	83.44
15038	CG	LYS	C	365	-42.759	-7.538	-9.376	1.00	84.51
15039	CD	LYS	C	365	-41.613	-8.533	-9.512	1.00	86.86
15040	CE	LYS	C	365	-40.252	-7.873	-9.311	1.00	87.71
15041	NZ	LYS	C	365	-39.224	-8.880	-8.916	1.00	88.36
15042	C	LYS	C	365	-46.455	-8.219	-8.411	1.00	83.34
15043	O	LYS	C	365	-46.762	-8.019	-7.235	1.00	83.50
15044	N	LYS	C	366	-47.075	-9.106	-9.183	1.00	83.35
15045	CA	LYS	C	366	-48.243	-9.844	-8.721	1.00	83.39
15046	CB	LYS	C	366	-49.036	-10.411	-9.910	1.00	83.60
15047	CG	LYS	C	366	-48.626	-11.814	-10.355	1.00	84.31
15048	CD	LYS	C	366	-47.487	-11.797	-11.371	1.00	85.61
15049	CE	LYS	C	366	-47.186	-13.206	-11.897	1.00	86.23
15050	NZ	LYS	C	366	-48.397	-13.882	-12.470	1.00	86.15
15051	C	LYS	C	366	-47.941	-10.962	-7.725	1.00	83.10
15052	O	LYS	C	366	-48.848	-11.444	-7.045	1.00	83.31
15053	N	ASP	C	367	-46.685	-11.381	-7.615	1.00	82.61
15054	CA	ASP	C	367	-46.419	-12.516	-6.734	1.00	82.00
15055	CB	ASP	C	367	-46.002	-13.772	-7.508	1.00	82.19
15056	CG	ASP	C	367	-47.194	-14.657	-7.854	1.00	82.72
15057	OD1	ASP	C	367	-48.236	-14.113	-8.284	1.00	83.37
15058	OD2	ASP	C	367	-47.190	-15.901	-7.718	1.00	82.87
15059	C	ASP	C	367	-45.579	-12.312	-5.479	1.00	81.38
15060	O	ASP	C	367	-44.378	-12.034	-5.507	1.00	81.42
15061	N	CYS	C	368	-46.292	-12.472	-4.377	1.00	80.38
15062	CA	CYS	C	368	-45.807	-12.363	-3.024	1.00	79.24
15063	CB	CYS	C	368	-47.032	-12.575	-2.134	1.00	79.05
15064	SG	CYS	C	368	-46.742	-13.495	-0.629	1.00	77.56
15065	C	CYS	C	368	-44.721	-13.385	-2.660	1.00	78.87
15066	O	CYS	C	368	-44.689	-14.494	-3.196	1.00	78.67
15067	N	THR	C	369	-43.835	-13.000	-1.745	1.00	78.25
15068	CA	THR	C	369	-42.818	-13.914	-1.221	1.00	77.82
15069	CB	THR	C	369	-41.409	-13.544	-1.732	1.00	77.94
15070	OG1	THR	C	369	-40.422	-14.081	-0.842	1.00	77.58
15071	CG2	THR	C	369	-41.180	-12.037	-1.653	1.00	78.12
15072	C	THR	C	369	-42.863	-13.925	0.310	1.00	77.36
15073	O	THR	C	369	-42.684	-12.883	0.953	1.00	77.28
15074	N	PHE	C	370	-43.109	-15.100	0.887	1.00	76.69
15075	CA	PHE	C	370	-43.253	-15.235	2.338	1.00	76.14
15076	CB	PHE	C	370	-43.971	-16.542	2.675	1.00	76.21
15077	CG	PHE	C	370	-45.367	-16.628	2.130	1.00	76.75
15078	CD1	PHE	C	370	-46.356	-15.777	2.593	1.00	76.78
15079	CE1	PHE	C	370	-47.642	-15.858	2.100	1.00	77.24
15080	CZ	PHE	C	370	-47.957	-16.789	1.129	1.00	77.79
15081	CE2	PHE	C	370	-46.984	-17.652	0.660	1.00	77.95
15082	CD2	PHE	C	370	-45.694	-17.568	1.161	1.00	77.40
15083	C	PHE	C	370	-41.930	-15.178	3.100	1.00	75.59
15084	O	PHE	C	370	-41.067	-16.023	2.905	1.00	75.56
15085	N	ILE	C	371	-41.781	-14.197	3.987	1.00	75.00
15086	CA	ILE	C	371	-40.553	-14.074	4.774	1.00	74.48

FIGURE 3 KJ

A	B	C	D	E	F	G	H	I	J
15087	CB	ILE	C	371	-40.224	-12.604	5.080	1.00	74.45
15088	CG1	ILE	C	371	-41.075	-12.081	6.237	1.00	74.44
15089	CD1	ILE	C	371	-40.671	-10.690	6.691	1.00	73.38
15090	CG2	ILE	C	371	-40.398	-11.753	3.840	1.00	74.48
15091	C	ILE	C	371	-40.547	-14.910	6.062	1.00	74.18
15092	O	ILE	C	371	-39.534	-14.971	6.765	1.00	74.17
15093	N	THR	C	372	-41.679	-15.541	6.368	1.00	73.78
15094	CA	THR	C	372	-41.783	-16.474	7.491	1.00	73.26
15095	CB	THR	C	372	-42.432	-15.824	8.737	1.00	73.15
15096	OG1	THR	C	372	-43.538	-15.007	8.343	1.00	73.10
15097	CG2	THR	C	372	-41.487	-14.838	9.395	1.00	72.71
15098	C	THR	C	372	-42.599	-17.682	7.046	1.00	73.15
15099	O	THR	C	372	-43.320	-17.617	6.048	1.00	73.30
15100	N	LYS	C	373	-42.484	-18.783	7.780	1.00	72.86
15101	CA	LYS	C	373	-43.240	-19.997	7.470	1.00	72.65
15102	CB	LYS	C	373	-42.706	-20.661	6.196	1.00	72.82
15103	CG	LYS	C	373	-42.761	-22.185	6.182	1.00	73.44
15104	CD	LYS	C	373	-41.522	-22.784	6.853	1.00	74.34
15105	CE	LYS	C	373	-41.593	-24.304	6.916	1.00	74.49
15106	NZ	LYS	C	373	-40.471	-24.867	7.718	1.00	74.69
15107	C	LYS	C	373	-43.227	-20.958	8.655	1.00	72.30
15108	O	LYS	C	373	-42.544	-20.710	9.651	1.00	72.41
15109	N	GLY	C	374	-43.992	-22.041	8.560	1.00	71.83
15110	CA	GLY	C	374	-44.054	-23.018	9.634	1.00	71.28
15111	C	GLY	C	374	-45.459	-23.178	10.180	1.00	70.87
15112	O	GLY	C	374	-46.300	-22.297	10.010	1.00	70.98
15113	N	THR	C	375	-45.716	-24.297	10.850	1.00	70.35
15114	CA	THR	C	375	-47.050	-24.575	11.379	1.00	69.61
15115	CB	THR	C	375	-47.231	-26.072	11.641	1.00	69.71
15116	OG1	THR	C	375	-46.343	-26.482	12.688	1.00	70.00
15117	CG2	THR	C	375	-46.773	-26.879	10.431	1.00	69.74
15118	C	THR	C	375	-47.392	-23.773	12.633	1.00	69.01
15119	O	THR	C	375	-47.752	-24.331	13.673	1.00	68.90
15120	N	TRP	C	376	-47.248	-22.459	12.516	1.00	68.03
15121	CA	TRP	C	376	-47.659	-21.514	13.541	1.00	67.27
15122	CB	TRP	C	376	-46.492	-21.080	14.432	1.00	67.25
15123	CG	TRP	C	376	-45.221	-20.789	13.707	1.00	67.49
15124	CD1	TRP	C	376	-44.318	-21.700	13.240	1.00	67.72
15125	NE1	TRP	C	376	-43.264	-21.055	12.639	1.00	67.99
15126	CE2	TRP	C	376	-43.468	-19.704	12.713	1.00	67.87
15127	CD2	TRP	C	376	-44.689	-19.500	13.386	1.00	67.80
15128	CE3	TRP	C	376	-45.123	-18.188	13.596	1.00	68.37
15129	CZ3	TRP	C	376	-44.338	-17.143	13.137	1.00	69.05
15130	CH2	TRP	C	376	-43.129	-17.381	12.475	1.00	68.72
15131	CZ2	TRP	C	376	-42.680	-18.652	12.251	1.00	68.56
15132	C	TRP	C	376	-48.247	-20.340	12.772	1.00	66.68
15133	O	TRP	C	376	-48.629	-20.503	11.614	1.00	66.63
15134	N	GLU	C	377	-48.329	-19.165	13.385	1.00	65.79
15135	CA	GLU	C	377	-48.887	-18.012	12.678	1.00	64.99
15136	CB	GLU	C	377	-50.419	-18.010	12.746	1.00	64.86
15137	CG	GLU	C	377	-51.109	-18.870	11.705	1.00	64.15

FIGURE 3 KK

A	B	C	D	E	F	G	H	I	J
15138	CD	GLU	C	377	-52.598	-18.594	11.611	1.00	63.47
15139	OE1	GLU	C	377	-53.272	-19.248	10.792	1.00	62.60
15140	OE2	GLU	C	377	-53.094	-17.719	12.351	1.00	63.07
15141	C	GLU	C	377	-48.381	-16.689	13.209	1.00	64.51
15142	O	GLU	C	377	-48.070	-16.556	14.388	1.00	64.50
15143	N	VAL	C	378	-48.299	-15.709	12.321	1.00	64.08
15144	CA	VAL	C	378	-47.929	-14.365	12.710	1.00	63.89
15145	CB	VAL	C	378	-47.246	-13.617	11.563	1.00	63.89
15146	CG1	VAL	C	378	-46.862	-12.223	12.004	1.00	64.19
15147	CG2	VAL	C	378	-46.029	-14.377	11.089	1.00	64.23
15148	C	VAL	C	378	-49.215	-13.640	13.083	1.00	63.81
15149	O	VAL	C	378	-50.144	-13.555	12.279	1.00	63.51
15150	N	ILE	C	379	-49.281	-13.137	14.307	1.00	63.71
15151	CA	ILE	C	379	-50.478	-12.447	14.751	1.00	63.80
15152	CB	ILE	C	379	-50.504	-12.332	16.275	1.00	63.89
15153	CG1	ILE	C	379	-50.146	-13.676	16.922	1.00	63.72
15154	CD1	ILE	C	379	-51.032	-14.813	16.502	1.00	63.32
15155	CG2	ILE	C	379	-51.863	-11.835	16.732	1.00	63.72
15156	C	ILE	C	379	-50.597	-11.068	14.113	1.00	63.94
15157	O	ILE	C	379	-51.646	-10.711	13.578	1.00	63.80
15158	N	GLY	C	380	-49.517	-10.296	14.160	1.00	64.02
15159	CA	GLY	C	380	-49.534	-8.968	13.578	1.00	64.29
15160	C	GLY	C	380	-48.179	-8.302	13.415	1.00	64.54
15161	O	GLY	C	380	-47.232	-8.570	14.162	1.00	64.54
15162	N	ILE	C	381	-48.089	-7.428	12.421	1.00	64.57
15163	CA	ILE	C	381	-46.873	-6.676	12.192	1.00	64.84
15164	CB	ILE	C	381	-46.717	-6.344	10.707	1.00	64.72
15165	CG1	ILE	C	381	-46.552	-7.631	9.899	1.00	64.80
15166	CD1	ILE	C	381	-46.571	-7.435	8.394	1.00	64.65
15167	CG2	ILE	C	381	-45.519	-5.436	10.498	1.00	64.95
15168	C	ILE	C	381	-46.907	-5.421	13.059	1.00	65.21
15169	O	ILE	C	381	-47.781	-4.563	12.907	1.00	65.15
15170	N	GLU	C	382	-45.956	-5.329	13.979	1.00	65.60
15171	CA	GLU	C	382	-45.921	-4.231	14.935	1.00	66.17
15172	CB	GLU	C	382	-45.389	-4.731	16.278	1.00	66.09
15173	CG	GLU	C	382	-46.177	-5.902	16.839	1.00	65.95
15174	CD	GLU	C	382	-47.639	-5.561	17.052	1.00	65.14
15175	OE1	GLU	C	382	-48.503	-6.320	16.566	1.00	65.03
15176	OE2	GLU	C	382	-47.920	-4.529	17.700	1.00	64.58
15177	C	GLU	C	382	-45.093	-3.047	14.464	1.00	66.69
15178	O	GLU	C	382	-45.406	-1.896	14.773	1.00	66.74
15179	N	ALA	C	383	-44.029	-3.327	13.726	1.00	67.53
15180	CA	ALA	C	383	-43.170	-2.266	13.233	1.00	68.34
15181	CB	ALA	C	383	-42.480	-1.559	14.388	1.00	68.30
15182	C	ALA	C	383	-42.145	-2.820	12.270	1.00	69.06
15183	O	ALA	C	383	-41.887	-4.025	12.243	1.00	68.99
15184	N	LEU	C	384	-41.574	-1.931	11.466	1.00	70.07
15185	CA	LEU	C	384	-40.537	-2.322	10.529	1.00	71.18
15186	CB	LEU	C	384	-41.134	-2.985	9.283	1.00	71.08
15187	CG	LEU	C	384	-41.598	-2.215	8.050	1.00	70.73
15188	CD1	LEU	C	384	-42.255	-0.893	8.410	1.00	71.00

FIGURE 3 KL

A	B	C	D	E	F	G	H	I	J
15189	CD2	LEU	C	384	-40.432	-2.013	7.115	1.00	70.62
15190	C	LEU	C	384	-39.638	-1.147	10.175	1.00	72.11
15191	O	LEU	C	384	-40.065	0.013	10.174	1.00	72.11
15192	N	THR	C	385	-38.375	-1.459	9.908	1.00	73.22
15193	CA	THR	C	385	-37.399	-0.450	9.537	1.00	74.09
15194	CB	THR	C	385	-36.324	-0.313	10.622	1.00	74.18
15195	OG1	THR	C	385	-35.765	-1.604	10.900	1.00	74.54
15196	CG2	THR	C	385	-36.942	0.105	11.952	1.00	74.19
15197	C	THR	C	385	-36.739	-0.886	8.250	1.00	74.71
15198	O	THR	C	385	-37.142	-1.878	7.633	1.00	74.71
15199	N	SER	C	386	-35.714	-0.141	7.852	1.00	75.39
15200	CA	SER	C	386	-34.951	-0.481	6.666	1.00	75.74
15201	CB	SER	C	386	-33.885	0.581	6.409	1.00	75.89
15202	OG	SER	C	386	-33.049	0.745	7.543	1.00	76.23
15203	C	SER	C	386	-34.299	-1.844	6.871	1.00	75.84
15204	O	SER	C	386	-34.289	-2.679	5.965	1.00	75.99
15205	N	ASP	C	387	-33.787	-2.070	8.080	1.00	75.87
15206	CA	ASP	C	387	-33.075	-3.304	8.412	1.00	75.91
15207	CB	ASP	C	387	-31.965	-3.012	9.423	1.00	75.99
15208	CG	ASP	C	387	-30.943	-2.022	8.902	1.00	76.35
15209	OD1	ASP	C	387	-30.150	-2.397	8.007	1.00	76.07
15210	OD2	ASP	C	387	-30.858	-0.851	9.335	1.00	76.17
15211	C	ASP	C	387	-33.956	-4.409	8.986	1.00	75.86
15212	O	ASP	C	387	-33.943	-5.543	8.504	1.00	75.84
15213	N	TYR	C	388	-34.710	-4.071	10.028	1.00	75.74
15214	CA	TYR	C	388	-35.521	-5.052	10.742	1.00	75.46
15215	CB	TYR	C	388	-35.201	-4.996	12.238	1.00	75.65
15216	CG	TYR	C	388	-33.825	-5.486	12.616	1.00	76.32
15217	CD1	TYR	C	388	-32.846	-4.601	13.056	1.00	76.99
15218	CE1	TYR	C	388	-31.584	-5.046	13.417	1.00	77.33
15219	CZ	TYR	C	388	-31.291	-6.394	13.340	1.00	77.96
15220	OH	TYR	C	388	-30.037	-6.857	13.690	1.00	77.89
15221	CE2	TYR	C	388	-32.254	-7.289	12.909	1.00	77.82
15222	CD2	TYR	C	388	-33.508	-6.834	12.550	1.00	76.98
15223	C	TYR	C	388	-37.026	-4.869	10.578	1.00	74.96
15224	O	TYR	C	388	-37.511	-3.766	10.309	1.00	75.20
15225	N	LEU	C	389	-37.750	-5.972	10.746	1.00	74.08
15226	CA	LEU	C	389	-39.207	-5.977	10.767	1.00	73.25
15227	CB	LEU	C	389	-39.778	-6.765	9.582	1.00	73.17
15228	CG	LEU	C	389	-41.282	-7.089	9.609	1.00	73.03
15229	CD1	LEU	C	389	-42.102	-5.935	9.072	1.00	73.08
15230	CD2	LEU	C	389	-41.589	-8.335	8.808	1.00	72.28
15231	C	LEU	C	389	-39.594	-6.648	12.082	1.00	72.63
15232	O	LEU	C	389	-39.166	-7.765	12.362	1.00	72.66
15233	N	TYR	C	390	-40.388	-5.971	12.898	1.00	71.77
15234	CA	TYR	C	390	-40.778	-6.532	14.181	1.00	71.08
15235	CB	TYR	C	390	-40.611	-5.495	15.283	1.00	71.26
15236	CG	TYR	C	390	-39.202	-4.979	15.456	1.00	71.69
15237	CD1	TYR	C	390	-38.352	-5.537	16.399	1.00	72.61
15238	CE1	TYR	C	390	-37.063	-5.063	16.574	1.00	73.10
15239	CZ	TYR	C	390	-36.610	-4.017	15.802	1.00	73.31

FIGURE 3 KM

A	B	C	D	E	F	G	H	I	J
15240	OH	TYR	C	390	-35.328	-3.552	15.981	1.00	74.22
15241	CE2	TYR	C	390	-37.437	-3.442	14.857	1.00	72.86
15242	CD2	TYR	C	390	-38.726	-3.922	14.692	1.00	72.23
15243	C	TYR	C	390	-42.222	-7.014	14.153	1.00	70.54
15244	O	TYR	C	390	-43.129	-6.248	13.827	1.00	70.53
15245	N	TYR	C	391	-42.433	-8.280	14.505	1.00	69.72
15246	CA	TYR	C	391	-43.770	-8.862	14.511	1.00	68.92
15247	CB	TYR	C	391	-43.988	-9.684	13.244	1.00	68.70
15248	CG	TYR	C	391	-43.251	-11.002	13.247	1.00	68.25
15249	CD1	TYR	C	391	-43.823	-12.136	13.805	1.00	67.77
15250	CE1	TYR	C	391	-43.157	-13.340	13.813	1.00	67.68
15251	CZ	TYR	C	391	-41.894	-13.430	13.256	1.00	68.06
15252	OH	TYR	C	391	-41.228	-14.637	13.262	1.00	67.59
15253	CE2	TYR	C	391	-41.301	-12.318	12.693	1.00	67.91
15254	CD2	TYR	C	391	-41.982	-11.111	12.694	1.00	68.53
15255	C	TYR	C	391	-44.015	-9.749	15.733	1.00	68.50
15256	O	TYR	C	391	-43.085	-10.115	16.442	1.00	68.48
15257	N	ILE	C	392	-45.280	-10.090	15.971	1.00	67.95
15258	CA	ILE	C	392	-45.644	-10.989	17.060	1.00	67.42
15259	CB	ILE	C	392	-46.625	-10.305	18.021	1.00	67.47
15260	CG1	ILE	C	392	-45.847	-9.569	19.109	1.00	67.27
15261	CD1	ILE	C	392	-46.609	-8.451	19.751	1.00	67.55
15262	CG2	ILE	C	392	-47.575	-11.322	18.647	1.00	67.28
15263	C	ILE	C	392	-46.238	-12.254	16.462	1.00	67.12
15264	O	ILE	C	392	-46.812	-12.214	15.379	1.00	67.16
15265	N	SER	C	393	-46.082	-13.379	17.147	1.00	66.70
15266	CA	SER	C	393	-46.593	-14.640	16.626	1.00	66.57
15267	CB	SER	C	393	-45.690	-15.151	15.503	1.00	66.66
15268	OG	SER	C	393	-44.423	-15.548	16.003	1.00	67.01
15269	C	SER	C	393	-46.703	-15.696	17.717	1.00	66.31
15270	O	SER	C	393	-46.386	-15.438	18.871	1.00	66.19
15271	N	ASN	C	394	-47.155	-16.888	17.348	1.00	66.35
15272	CA	ASN	C	394	-47.292	-17.972	18.319	1.00	66.39
15273	CB	ASN	C	394	-48.750	-18.444	18.407	1.00	66.16
15274	CG	ASN	C	394	-49.319	-18.846	17.066	1.00	65.56
15275	OD1	ASN	C	394	-48.593	-18.981	16.086	1.00	65.23
15276	ND2	ASN	C	394	-50.629	-19.040	17.016	1.00	65.22
15277	C	ASN	C	394	-46.356	-19.157	18.052	1.00	66.50
15278	O	ASN	C	394	-46.687	-20.300	18.368	1.00	66.51
15279	N	GLU	C	395	-45.185	-18.875	17.482	1.00	66.64
15280	CA	GLU	C	395	-44.230	-19.924	17.142	1.00	66.67
15281	CB	GLU	C	395	-43.072	-19.370	16.307	1.00	66.82
15282	CG	GLU	C	395	-42.122	-20.459	15.822	1.00	67.70
15283	CD	GLU	C	395	-40.949	-19.930	15.020	1.00	68.12
15284	OE1	GLU	C	395	-40.322	-20.728	14.288	1.00	68.71
15285	OE2	GLU	C	395	-40.651	-18.723	15.121	1.00	68.27
15286	C	GLU	C	395	-43.671	-20.641	18.362	1.00	66.42
15287	O	GLU	C	395	-43.648	-21.873	18.412	1.00	66.27
15288	N	TYR	C	396	-43.225	-19.866	19.342	1.00	66.28
15289	CA	TYR	C	396	-42.606	-20.436	20.531	1.00	66.48
15290	CB	TYR	C	396	-42.505	-19.408	21.659	1.00	66.75



FIGURE 3 KN

A	B	C	D	E	F	G	H	I	J
15291	CG	TYR	C	396	-41.531	-19.826	22.736	1.00	67.82
15292	CD1	TYR	C	396	-41.874	-19.764	24.081	1.00	68.27
15293	CE1	TYR	C	396	-40.981	-20.158	25.063	1.00	69.27
15294	CZ	TYR	C	396	-39.731	-20.626	24.704	1.00	69.93
15295	OH	TYR	C	396	-38.833	-21.021	25.674	1.00	70.35
15296	CE2	TYR	C	396	-39.372	-20.701	23.373	1.00	69.62
15297	CD2	TYR	C	396	-40.269	-20.305	22.401	1.00	68.57
15298	C	TYR	C	396	-43.299	-21.704	21.019	1.00	66.20
15299	O	TYR	C	396	-44.528	-21.795	21.038	1.00	66.42
15300	N	LYS	C	397	-42.488	-22.691	21.384	1.00	65.75
15301	CA	LYS	C	397	-42.971	-23.970	21.900	1.00	65.28
15302	CB	LYS	C	397	-43.252	-23.873	23.400	1.00	65.42
15303	CG	LYS	C	397	-42.018	-23.960	24.289	1.00	65.46
15304	CD	LYS	C	397	-42.305	-23.373	25.669	1.00	66.31
15305	CE	LYS	C	397	-41.350	-23.920	26.725	1.00	66.99
15306	NZ	LYS	C	397	-39.955	-24.025	26.215	1.00	67.31
15307	C	LYS	C	397	-44.204	-24.501	21.186	1.00	64.87
15308	O	LYS	C	397	-44.865	-25.410	21.688	1.00	64.77
15309	N	GLY	C	398	-44.513	-23.939	20.021	1.00	64.29
15310	CA	GLY	C	398	-45.661	-24.389	19.254	1.00	63.76
15311	C	GLY	C	398	-46.945	-24.313	20.057	1.00	63.30
15312	O	GLY	C	398	-47.739	-25.256	20.076	1.00	63.47
15313	N	MET	C	399	-47.133	-23.188	20.738	1.00	62.72
15314	CA	MET	C	399	-48.319	-22.965	21.547	1.00	61.97
15315	CB	MET	C	399	-47.931	-22.537	22.963	1.00	61.89
15316	CG	MET	C	399	-46.667	-23.173	23.498	1.00	62.45
15317	SD	MET	C	399	-46.535	-23.090	25.306	1.00	62.64
15318	CE	MET	C	399	-47.375	-24.588	25.754	1.00	62.36
15319	C	MET	C	399	-49.156	-21.867	20.902	1.00	61.45
15320	O	MET	C	399	-48.801	-20.691	20.967	1.00	61.30
15321	N	PRO	C	400	-50.255	-22.252	20.266	1.00	60.94
15322	CA	PRO	C	400	-51.156	-21.294	19.612	1.00	60.42
15323	CB	PRO	C	400	-52.332	-22.169	19.192	1.00	60.57
15324	CG	PRO	C	400	-51.728	-23.522	19.009	1.00	60.79
15325	CD	PRO	C	400	-50.699	-23.644	20.094	1.00	60.71
15326	C	PRO	C	400	-51.633	-20.192	20.552	1.00	60.01
15327	O	PRO	C	400	-51.817	-19.057	20.123	1.00	59.89
15328	N	GLY	C	401	-51.821	-20.524	21.825	1.00	59.54
15329	CA	GLY	C	401	-52.283	-19.561	22.806	1.00	58.92
15330	C	GLY	C	401	-51.167	-18.736	23.410	1.00	58.69
15331	O	GLY	C	401	-51.384	-17.964	24.340	1.00	58.61
15332	N	GLY	C	402	-49.960	-18.906	22.889	1.00	58.52
15333	CA	GLY	C	402	-48.831	-18.135	23.358	1.00	58.25
15334	C	GLY	C	402	-48.493	-17.041	22.373	1.00	58.21
15335	O	GLY	C	402	-48.727	-17.185	21.175	1.00	57.66
15336	N	ARG	C	403	-47.940	-15.947	22.885	1.00	58.56
15337	CA	ARG	C	403	-47.571	-14.794	22.068	1.00	59.11
15338	CB	ARG	C	403	-48.529	-13.631	22.334	1.00	59.24
15339	CG	ARG	C	403	-49.540	-13.330	21.236	1.00	59.55
15340	CD	ARG	C	403	-50.288	-14.530	20.729	1.00	59.11
15341	NE	ARG	C	403	-51.619	-14.189	20.246	1.00	58.74

FIGURE 3 KO

A	B	C	D	E	F	G	H	I	J
15342	CZ	ARG	C	403	-52.564	-15.090	20.013	1.00	59.71
15343	NH1	ARG	C	403	-53.761	-14.713	19.577	1.00	60.37
15344	NH2	ARG	C	403	-52.311	-16.379	20.214	1.00	59.35
15345	C	ARG	C	403	-46.163	-14.328	22.396	1.00	59.34
15346	O	ARG	C	403	-45.799	-14.214	23.557	1.00	59.25
15347	N	ASN	C	404	-45.373	-14.048	21.370	1.00	60.20
15348	CA	ASN	C	404	-44.026	-13.535	21.571	1.00	60.98
15349	CB	ASN	C	404	-43.009	-14.672	21.692	1.00	60.61
15350	CG	ASN	C	404	-42.957	-15.252	23.081	1.00	59.51
15351	OD1	ASN	C	404	-43.361	-16.392	23.302	1.00	58.86
15352	ND2	ASN	C	404	-42.473	-14.465	24.034	1.00	56.75
15353	C	ASN	C	404	-43.604	-12.578	20.477	1.00	61.92
15354	O	ASN	C	404	-44.037	-12.692	19.330	1.00	62.03
15355	N	LEU	C	405	-42.751	-11.634	20.850	1.00	63.31
15356	CA	LEU	C	405	-42.228	-10.646	19.921	1.00	64.62
15357	CB	LEU	C	405	-41.855	-9.375	20.678	1.00	64.50
15358	CG	LEU	C	405	-41.271	-8.234	19.852	1.00	64.07
15359	CD1	LEU	C	405	-42.203	-7.902	18.707	1.00	64.27
15360	CD2	LEU	C	405	-41.044	-7.020	20.725	1.00	63.89
15361	C	LEU	C	405	-41.003	-11.188	19.186	1.00	65.74
15362	O	LEU	C	405	-40.084	-11.726	19.799	1.00	65.57
15363	N	TYR	C	406	-40.996	-11.044	17.867	1.00	67.23
15364	CA	TYR	C	406	-39.878	-11.515	17.066	1.00	68.66
15365	CB	TYR	C	406	-40.300	-12.700	16.199	1.00	68.64
15366	CG	TYR	C	406	-40.543	-13.966	16.981	1.00	69.15
15367	CD1	TYR	C	406	-39.603	-14.985	16.994	1.00	69.73
15368	CE1	TYR	C	406	-39.816	-16.145	17.707	1.00	69.38
15369	CZ	TYR	C	406	-40.977	-16.299	18.424	1.00	69.23
15370	OH	TYR	C	406	-41.180	-17.457	19.137	1.00	70.18
15371	CE2	TYR	C	406	-41.927	-15.304	18.432	1.00	69.38
15372	CD2	TYR	C	406	-41.707	-14.142	17.713	1.00	69.55
15373	C	TYR	C	406	-39.323	-10.405	16.189	1.00	69.60
15374	O	TYR	C	406	-40.053	-9.504	15.776	1.00	69.80
15375	N	LYS	C	407	-38.024	-10.479	15.916	1.00	70.75
15376	CA	LYS	C	407	-37.349	-9.527	15.040	1.00	71.87
15377	CB	LYS	C	407	-36.271	-8.765	15.816	1.00	71.82
15378	CG	LYS	C	407	-35.043	-8.425	15.001	1.00	72.36
15379	CD	LYS	C	407	-33.811	-8.216	15.882	1.00	73.33
15380	CE	LYS	C	407	-33.870	-6.892	16.648	1.00	73.70
15381	NZ	LYS	C	407	-32.523	-6.458	17.135	1.00	72.93
15382	C	LYS	C	407	-36.730	-10.275	13.859	1.00	72.57
15383	O	LYS	C	407	-35.918	-11.184	14.049	1.00	72.66
15384	N	ILE	C	408	-37.134	-9.920	12.642	1.00	73.55
15385	CA	ILE	C	408	-36.574	-10.569	11.457	1.00	74.61
15386	CB	ILE	C	408	-37.675	-11.197	10.573	1.00	74.55
15387	CG1	ILE	C	408	-37.061	-11.771	9.292	1.00	74.57
15388	CD1	ILE	C	408	-37.993	-12.675	8.518	1.00	74.07
15389	CG2	ILE	C	408	-38.743	-10.177	10.235	1.00	74.38
15390	C	ILE	C	408	-35.690	-9.619	10.650	1.00	75.36
15391	O	ILE	C	408	-36.025	-8.444	10.458	1.00	75.35
15392	N	GLN	C	409	-34.550	-10.134	10.195	1.00	76.31

FIGURE 3 KP

A	B	C	D	E	F	G	H	I	J
15393	CA	GLN	C	409	-33.606	-9.332	9.429	1.00	77.25
15394	CB	GLN	C	409	-32.189	-9.896	9.536	1.00	77.43
15395	CG	GLN	C	409	-31.403	-9.345	10.712	1.00	78.15
15396	CD	GLN	C	409	-29.901	-9.363	10.486	1.00	79.40
15397	OE1	GLN	C	409	-29.187	-10.134	11.130	1.00	79.63
15398	NE2	GLN	C	409	-29.416	-8.511	9.578	1.00	79.37
15399	C	GLN	C	409	-34.006	-9.209	7.971	1.00	77.64
15400	O	GLN	C	409	-33.949	-10.183	7.217	1.00	77.63
15401	N	LEU	C	410	-34.408	-8.004	7.579	1.00	78.26
15402	CA	LEU	C	410	-34.802	-7.746	6.199	1.00	78.91
15403	CB	LEU	C	410	-35.204	-6.283	6.024	1.00	78.97
15404	CG	LEU	C	410	-36.688	-5.972	6.239	1.00	79.51
15405	CD1	LEU	C	410	-37.403	-7.109	6.947	1.00	79.61
15406	CD2	LEU	C	410	-36.862	-4.665	6.994	1.00	80.14
15407	C	LEU	C	410	-33.657	-8.103	5.261	1.00	79.27
15408	O	LEU	C	410	-33.875	-8.460	4.100	1.00	79.38
15409	N	SER	C	411	-32.436	-8.010	5.781	1.00	79.62
15410	CA	SER	C	411	-31.244	-8.354	5.024	1.00	79.96
15411	CB	SER	C	411	-29.989	-7.847	5.741	1.00	80.09
15412	OG	SER	C	411	-29.988	-8.221	7.110	1.00	80.33
15413	C	SER	C	411	-31.179	-9.862	4.828	1.00	80.08
15414	O	SER	C	411	-30.775	-10.346	3.773	1.00	80.06
15415	N	ASP	C	412	-31.573	-10.603	5.857	1.00	80.29
15416	CA	ASP	C	412	-31.625	-12.057	5.755	1.00	80.44
15417	CB	ASP	C	412	-30.365	-12.717	6.306	1.00	80.22
15418	CG	ASP	C	412	-30.399	-14.225	6.157	1.00	80.04
15419	OD1	ASP	C	412	-30.016	-14.927	7.110	1.00	80.13
15420	OD2	ASP	C	412	-30.811	-14.800	5.126	1.00	79.50
15421	C	ASP	C	412	-32.857	-12.602	6.463	1.00	80.53
15422	O	ASP	C	412	-32.962	-12.544	7.691	1.00	80.55
15423	N	TYR	C	413	-33.778	-13.144	5.674	1.00	80.65
15424	CA	TYR	C	413	-35.044	-13.647	6.194	1.00	80.70
15425	CB	TYR	C	413	-35.984	-14.005	5.042	1.00	80.44
15426	CG	TYR	C	413	-36.379	-12.802	4.215	1.00	79.98
15427	CD1	TYR	C	413	-36.263	-11.517	4.729	1.00	79.54
15428	CE1	TYR	C	413	-36.619	-10.410	3.981	1.00	79.47
15429	CZ	TYR	C	413	-37.099	-10.576	2.698	1.00	79.40
15430	OH	TYR	C	413	-37.452	-9.468	1.957	1.00	79.09
15431	CE2	TYR	C	413	-37.223	-11.845	2.162	1.00	79.68
15432	CD2	TYR	C	413	-36.864	-12.947	2.921	1.00	79.74
15433	C	TYR	C	413	-34.894	-14.810	7.177	1.00	80.94
15434	O	TYR	C	413	-35.840	-15.149	7.889	1.00	80.92
15435	N	THR	C	414	-33.704	-15.406	7.227	1.00	81.10
15436	CA	THR	C	414	-33.453	-16.504	8.157	1.00	81.25
15437	CB	THR	C	414	-32.565	-17.590	7.518	1.00	81.48
15438	OG1	THR	C	414	-31.803	-17.025	6.439	1.00	81.83
15439	CG2	THR	C	414	-33.431	-18.634	6.821	1.00	81.92
15440	C	THR	C	414	-32.851	-16.016	9.469	1.00	81.06
15441	O	THR	C	414	-32.724	-16.777	10.423	1.00	81.18
15442	N	LYS	C	415	-32.486	-14.741	9.515	1.00	80.87
15443	CA	LYS	C	415	-31.943	-14.154	10.733	1.00	80.89

# FIGURE 3 KQ

A	B	C	D	E	F	G	H	I	J
15444	CB	LYS	C	415	-30.975	-13.014	10.404	1.00	81.12
15445	CG	LYS	C	415	-29.561	-13.471	10.050	1.00	81.84
15446	CD	LYS	C	415	-28.767	-12.345	9.387	1.00	82.89
15447	CE	LYS	C	415	-27.362	-12.798	8.990	1.00	83.68
15448	NZ	LYS	C	415	-26.719	-11.844	8.034	1.00	83.60
15449	C	LYS	C	415	-33.077	-13.663	11.632	1.00	80.55
15450	O	LYS	C	415	-33.450	-12.486	11.603	1.00	80.52
15451	N	VAL	C	416	-33.612	-14.574	12.442	1.00	80.08
15452	CA	VAL	C	416	-34.762	-14.268	13.284	1.00	79.53
15453	CB	VAL	C	416	-35.938	-15.185	12.937	1.00	79.55
15454	CG1	VAL	C	416	-37.215	-14.650	13.551	1.00	79.50
15455	CG2	VAL	C	416	-36.074	-15.318	11.424	1.00	79.34
15456	C	VAL	C	416	-34.495	-14.380	14.783	1.00	79.19
15457	O	VAL	C	416	-34.178	-15.455	15.294	1.00	79.08
15458	N	THR	C	417	-34.651	-13.262	15.483	1.00	78.72
15459	CA	THR	C	417	-34.447	-13.218	16.926	1.00	78.33
15460	CB	THR	C	417	-33.597	-11.975	17.298	1.00	78.39
15461	OG1	THR	C	417	-32.352	-12.003	16.587	1.00	78.51
15462	CG2	THR	C	417	-33.171	-12.022	18.760	1.00	78.40
15463	C	THR	C	417	-35.785	-13.144	17.657	1.00	77.84
15464	O	THR	C	417	-36.691	-12.438	17.214	1.00	77.89
15465	N	CYS	C	418	-35.918	-13.882	18.760	1.00	77.08
15466	CA	CYS	C	418	-37.108	-13.774	19.604	1.00	76.44
15467	CB	CYS	C	418	-37.616	-15.138	20.090	1.00	76.39
15468	SG	CYS	C	418	-39.136	-14.966	21.077	1.00	75.10
15469	C	CYS	C	418	-36.766	-12.909	20.809	1.00	76.30
15470	O	CYS	C	418	-36.133	-13.371	21.758	1.00	76.29
15471	N	LEU	C	419	-37.191	-11.656	20.791	1.00	75.89
15472	CA	LEU	C	419	-36.823	-10.766	21.879	1.00	75.66
15473	CB	LEU	C	419	-36.706	-9.322	21.388	1.00	75.74
15474	CG	LEU	C	419	-37.311	-8.998	20.022	1.00	75.92
15475	CD1	LEU	C	419	-37.369	-7.485	19.819	1.00	75.85
15476	CD2	LEU	C	419	-36.510	-9.663	18.916	1.00	75.49
15477	C	LEU	C	419	-37.710	-10.840	23.113	1.00	75.43
15478	O	LEU	C	419	-37.682	-9.932	23.940	1.00	75.59
15479	N	SER	C	420	-38.468	-11.922	23.267	1.00	75.00
15480	CA	SER	C	420	-39.344	-12.032	24.435	1.00	74.63
15481	CB	SER	C	420	-40.748	-11.494	24.115	1.00	74.69
15482	OG	SER	C	420	-41.363	-12.236	23.073	1.00	74.18
15483	C	SER	C	420	-39.437	-13.424	25.056	1.00	74.41
15484	O	SER	C	420	-39.605	-13.550	26.268	1.00	74.04
15485	N	CYS	C	421	-39.319	-14.459	24.229	1.00	74.36
15486	CA	CYS	C	421	-39.451	-15.845	24.691	1.00	74.56
15487	CB	CYS	C	421	-39.029	-16.843	23.601	1.00	74.55
15488	SG	CYS	C	421	-39.795	-16.675	21.974	1.00	75.47
15489	C	CYS	C	421	-38.677	-16.178	25.973	1.00	74.43
15490	O	CYS	C	421	-39.183	-16.900	26.837	1.00	74.45
15491	N	GLU	C	422	-37.459	-15.658	26.100	1.00	74.20
15492	CA	GLU	C	422	-36.601	-16.038	27.223	1.00	73.99
15493	CB	GLU	C	422	-35.238	-16.521	26.706	1.00	74.21
15494	CG	GLU	C	422	-35.018	-18.026	26.809	1.00	75.59

FIGURE 3 KR

A	B	C	D	E	F	G	H	I	J
15495	CD	GLU	C	422	-35.460	-18.796	25.575	1.00	77.17
15496	OE1	GLU	C	422	-35.065	-18.406	24.455	1.00	77.82
15497	OE2	GLU	C	422	-36.185	-19.806	25.728	1.00	78.01
15498	C	GLU	C	422	-36.395	-15.021	28.345	1.00	73.45
15499	O	GLU	C	422	-35.564	-15.235	29.228	1.00	73.43
15500	N	LEU	C	423	-37.140	-13.922	28.329	1.00	72.79
15501	CA	LEU	C	423	-36.977	-12.903	29.363	1.00	72.14
15502	CB	LEU	C	423	-37.689	-11.611	28.963	1.00	72.15
15503	CG	LEU	C	423	-37.469	-11.097	27.539	1.00	72.52
15504	CD1	LEU	C	423	-38.348	-9.879	27.276	1.00	72.06
15505	CD2	LEU	C	423	-36.000	-10.769	27.297	1.00	72.84
15506	C	LEU	C	423	-37.516	-13.381	30.708	1.00	71.58
15507	O	LEU	C	423	-37.027	-12.987	31.769	1.00	71.53
15508	N	ASN	C	424	-38.535	-14.227	30.638	1.00	70.83
15509	CA	ASN	C	424	-39.222	-14.756	31.804	1.00	70.18
15510	CB	ASN	C	424	-40.111	-13.680	32.435	1.00	70.20
15511	CG	ASN	C	424	-39.465	-13.000	33.636	1.00	70.68
15512	OD1	ASN	C	424	-39.510	-13.518	34.755	1.00	70.96
15513	ND2	ASN	C	424	-38.882	-11.825	33.414	1.00	70.15
15514	C	ASN	C	424	-40.096	-15.898	31.319	1.00	69.55
15515	O	ASN	C	424	-41.312	-15.856	31.464	1.00	69.47
15516	N	PRO	C	425	-39.475	-16.906	30.719	1.00	68.95
15517	CA	PRO	C	425	-40.203	-18.033	30.125	1.00	68.32
15518	CB	PRO	C	425	-39.083	-19.008	29.749	1.00	68.30
15519	CG	PRO	C	425	-37.914	-18.540	30.568	1.00	68.97
15520	CD	PRO	C	425	-38.021	-17.048	30.548	1.00	68.93
15521	C	PRO	C	425	-41.197	-18.699	31.068	1.00	67.68
15522	O	PRO	C	425	-42.075	-19.419	30.590	1.00	67.66
15523	N	GLU	C	426	-41.067	-18.483	32.374	1.00	66.88
15524	CA	GLU	C	426	-42.016	-19.071	33.317	1.00	66.13
15525	CB	GLU	C	426	-41.349	-19.432	34.647	1.00	66.25
15526	CG	GLU	C	426	-41.287	-20.931	34.915	1.00	66.77
15527	CD	GLU	C	426	-40.397	-21.685	33.936	1.00	67.43
15528	OE1	GLU	C	426	-40.744	-22.833	33.574	1.00	67.25
15529	OE2	GLU	C	426	-39.344	-21.141	33.538	1.00	67.61
15530	C	GLU	C	426	-43.256	-18.206	33.550	1.00	65.45
15531	O	GLU	C	426	-44.382	-18.709	33.516	1.00	65.35
15532	N	ARG	C	427	-43.060	-16.909	33.767	1.00	64.39
15533	CA	ARG	C	427	-44.195	-16.040	34.035	1.00	63.52
15534	CB	ARG	C	427	-43.862	-15.025	35.134	1.00	63.40
15535	CG	ARG	C	427	-43.537	-13.633	34.636	1.00	62.75
15536	CD	ARG	C	427	-44.289	-12.525	35.377	1.00	62.46
15537	NE	ARG	C	427	-43.531	-11.960	36.487	1.00	62.08
15538	CZ	ARG	C	427	-43.906	-10.893	37.183	1.00	62.69
15539	NH1	ARG	C	427	-43.146	-10.443	38.178	1.00	62.97
15540	NH2	ARG	C	427	-45.040	-10.271	36.887	1.00	61.77
15541	C	ARG	C	427	-44.741	-15.331	32.792	1.00	63.08
15542	O	ARG	C	427	-45.852	-14.803	32.818	1.00	62.99
15543	N	CYS	C	428	-43.985	-15.344	31.699	1.00	62.40
15544	CA	CYS	C	428	-44.394	-14.605	30.505	1.00	61.91
15545	CB	CYS	C	428	-43.562	-13.330	30.381	1.00	61.92

FIGURE 3 KS

A	B	C	D	E	F	G	H	I	J
15546	SG	CYS	C	428	-43.944	-12.035	31.581	1.00	62.74
15547	C	CYS	C	428	-44.307	-15.357	29.183	1.00	61.46
15548	O	CYS	C	428	-43.222	-15.555	28.658	1.00	61.37
15549	N	GLN	C	429	-45.451	-15.752	28.632	1.00	61.12
15550	CA	GLN	C	429	-45.469	-16.369	27.306	1.00	60.67
15551	CB	GLN	C	429	-45.514	-17.898	27.382	1.00	60.76
15552	CG	GLN	C	429	-46.496	-18.460	28.367	1.00	61.52
15553	CD	GLN	C	429	-46.191	-19.899	28.709	1.00	63.25
15554	OE1	GLN	C	429	-47.054	-20.772	28.599	1.00	64.26
15555	NE2	GLN	C	429	-44.959	-20.155	29.122	1.00	63.65
15556	C	GLN	C	429	-46.594	-15.800	26.430	1.00	60.28
15557	O	GLN	C	429	-47.020	-16.423	25.457	1.00	60.09
15558	N	TYR	C	430	-47.061	-14.608	26.793	1.00	59.73
15559	CA	TYR	C	430	-48.094	-13.903	26.042	1.00	59.11
15560	CB	TYR	C	430	-49.463	-14.121	26.675	1.00	58.89
15561	CG	TYR	C	430	-50.613	-13.846	25.738	1.00	57.34
15562	CD1	TYR	C	430	-51.038	-12.543	25.497	1.00	55.45
15563	CE1	TYR	C	430	-52.096	-12.284	24.638	1.00	54.59
15564	CZ	TYR	C	430	-52.742	-13.332	24.011	1.00	54.07
15565	OH	TYR	C	430	-53.790	-13.067	23.157	1.00	52.94
15566	CE2	TYR	C	430	-52.335	-14.637	24.232	1.00	54.36
15567	CD2	TYR	C	430	-51.275	-14.886	25.091	1.00	56.11
15568	C	TYR	C	430	-47.754	-12.422	26.035	1.00	59.11
15569	O	TYR	C	430	-48.080	-11.695	26.974	1.00	58.98
15570	N	TYR	C	431	-47.112	-11.981	24.961	1.00	59.30
15571	CA	TYR	C	431	-46.578	-10.623	24.879	1.00	59.63
15572	CB	TYR	C	431	-45.076	-10.671	24.531	1.00	59.24
15573	CG	TYR	C	431	-44.149	-10.882	25.720	1.00	58.79
15574	CD1	TYR	C	431	-43.723	-9.805	26.492	1.00	58.19
15575	CE1	TYR	C	431	-42.888	-9.986	27.579	1.00	57.16
15576	CZ	TYR	C	431	-42.461	-11.250	27.907	1.00	56.79
15577	OH	TYR	C	431	-41.625	-11.415	28.994	1.00	56.52
15578	CE2	TYR	C	431	-42.868	-12.340	27.156	1.00	56.46
15579	CD2	TYR	C	431	-43.704	-12.152	26.071	1.00	57.27
15580	C	TYR	C	431	-47.280	-9.706	23.881	1.00	60.12
15581	O	TYR	C	431	-47.754	-10.150	22.833	1.00	59.87
15582	N	SER	C	432	-47.336	-8.424	24.234	1.00	60.66
15583	CA	SER	C	432	-47.800	-7.371	23.338	1.00	61.67
15584	CB	SER	C	432	-49.197	-6.866	23.714	1.00	61.67
15585	OG	SER	C	432	-49.153	-5.919	24.767	1.00	61.26
15586	C	SER	C	432	-46.759	-6.249	23.428	1.00	62.43
15587	O	SER	C	432	-46.048	-6.134	24.438	1.00	62.68
15588	N	VAL	C	433	-46.667	-5.421	22.394	1.00	63.14
15589	CA	VAL	C	433	-45.611	-4.414	22.345	1.00	63.65
15590	CB	VAL	C	433	-44.420	-4.916	21.500	1.00	63.64
15591	CG1	VAL	C	433	-44.830	-5.065	20.041	1.00	62.88
15592	CG2	VAL	C	433	-43.248	-3.975	21.617	1.00	63.51
15593	C	VAL	C	433	-46.038	-3.071	21.778	1.00	64.30
15594	O	VAL	C	433	-46.864	-2.989	20.864	1.00	64.16
15595	N	SER	C	434	-45.438	-2.021	22.323	1.00	65.16
15596	CA	SER	C	434	-45.701	-0.658	21.897	1.00	66.07

FIGURE 3 KT

A	B	C	D	E	F	G	H	I	J
15597	CB	SER	C	434	-46.480	0.088	22.986	1.00	65.84
15598	OG	SER	C	434	-46.523	1.483	22.745	1.00	65.86
15599	C	SER	C	434	-44.370	0.032	21.631	1.00	66.81
15600	O	SER	C	434	-43.549	0.178	22.538	1.00	67.02
15601	N	PHE	C	435	-44.151	0.445	20.386	1.00	67.72
15602	CA	PHE	C	435	-42.912	1.130	20.020	1.00	68.43
15603	CB	PHE	C	435	-42.485	0.763	18.601	1.00	68.25
15604	CG	PHE	C	435	-42.050	-0.662	18.443	1.00	67.79
15605	CD1	PHE	C	435	-42.975	-1.657	18.183	1.00	66.96
15606	CE1	PHE	C	435	-42.573	-2.968	18.028	1.00	66.98
15607	CZ	PHE	C	435	-41.238	-3.297	18.125	1.00	66.90
15608	CE2	PHE	C	435	-40.306	-2.319	18.374	1.00	66.90
15609	CD2	PHE	C	435	-40.712	-1.005	18.532	1.00	67.60
15610	C	PHE	C	435	-43.039	2.644	20.117	1.00	69.13
15611	O	PHE	C	435	-44.137	3.183	20.253	1.00	68.97
15612	N	SER	C	436	-41.896	3.318	20.048	1.00	70.15
15613	CA	SER	C	436	-41.842	4.772	20.053	1.00	71.10
15614	CB	SER	C	436	-40.538	5.252	20.686	1.00	71.07
15615	OG	SER	C	436	-39.414	4.665	20.047	1.00	71.13
15616	C	SER	C	436	-41.935	5.240	18.605	1.00	71.89
15617	O	SER	C	436	-41.803	4.431	17.688	1.00	71.91
15618	N	LYS	C	437	-42.148	6.539	18.401	1.00	72.83
15619	CA	LYS	C	437	-42.320	7.101	17.057	1.00	73.87
15620	CB	LYS	C	437	-42.066	8.611	17.051	1.00	73.91
15621	CG	LYS	C	437	-43.330	9.472	16.895	1.00	74.68
15622	CD	LYS	C	437	-44.300	9.337	18.071	1.00	75.43
15623	CE	LYS	C	437	-45.331	8.225	17.854	1.00	76.20
15624	NZ	LYS	C	437	-46.410	8.606	16.898	1.00	76.22
15625	C	LYS	C	437	-41.532	6.423	15.930	1.00	74.48
15626	O	LYS	C	437	-42.113	6.054	14.907	1.00	74.53
15627	N	GLU	C	438	-40.222	6.264	16.107	1.00	75.26
15628	CA	GLU	C	438	-39.393	5.674	15.051	1.00	76.16
15629	CB	GLU	C	438	-38.279	6.641	14.624	1.00	76.38
15630	CG	GLU	C	438	-38.111	6.795	13.117	1.00	77.93
15631	CD	GLU	C	438	-38.580	8.152	12.618	1.00	79.88
15632	OE1	GLU	C	438	-39.345	8.827	13.346	1.00	80.51
15633	OE2	GLU	C	438	-38.170	8.552	11.503	1.00	80.50
15634	C	GLU	C	438	-38.792	4.309	15.411	1.00	76.21
15635	O	GLU	C	438	-37.980	3.768	14.656	1.00	76.39
15636	N	ALA	C	439	-39.163	3.776	16.570	1.00	76.32
15637	CA	ALA	C	439	-38.745	2.428	16.968	1.00	76.52
15638	CB	ALA	C	439	-38.634	1.520	15.740	1.00	76.33
15639	C	ALA	C	439	-37.481	2.305	17.833	1.00	76.63
15640	O	ALA	C	439	-37.087	1.194	18.186	1.00	76.76
15641	N	LYS	C	440	-36.848	3.420	18.180	1.00	76.64
15642	CA	LYS	C	440	-35.648	3.350	19.017	1.00	76.67
15643	CB	LYS	C	440	-35.168	4.746	19.423	1.00	76.79
15644	CG	LYS	C	440	-34.297	5.447	18.384	1.00	77.61
15645	CD	LYS	C	440	-33.503	6.584	19.027	1.00	78.97
15646	CE	LYS	C	440	-32.505	7.221	18.049	1.00	79.50
15647	NZ	LYS	C	440	-33.162	8.106	17.037	1.00	78.84

FIGURE 3 KU

A	B	C	D	E	F	G	H	I	J
15648	C	LYS	C	440	-35.870	2.487	20.262	1.00	76.42
15649	O	LYS	C	440	-34.972	1.768	20.703	1.00	76.42
15650	N	TYR	C	441	-37.072	2.560	20.822	1.00	76.10
15651	CA	TYR	C	441	-37.405	1.784	22.007	1.00	75.67
15652	CB	TYR	C	441	-37.616	2.699	23.210	1.00	75.88
15653	CG	TYR	C	441	-36.514	3.703	23.465	1.00	76.85
15654	CD1	TYR	C	441	-36.457	4.895	22.757	1.00	77.32
15655	CE1	TYR	C	441	-35.460	5.824	22.999	1.00	78.17
15656	CZ	TYR	C	441	-34.508	5.574	23.969	1.00	78.56
15657	OH	TYR	C	441	-33.516	6.498	24.214	1.00	78.85
15658	CE2	TYR	C	441	-34.546	4.401	24.694	1.00	78.20
15659	CD2	TYR	C	441	-35.550	3.475	24.441	1.00	78.08
15660	C	TYR	C	441	-38.675	0.979	21.786	1.00	75.10
15661	O	TYR	C	441	-39.273	1.031	20.710	1.00	75.17
15662	N	TYR	C	442	-39.078	0.239	22.816	1.00	74.20
15663	CA	TYR	C	442	-40.307	-0.549	22.780	1.00	73.30
15664	CB	TYR	C	442	-40.235	-1.673	21.735	1.00	73.19
15665	CG	TYR	C	442	-39.195	-2.740	21.994	1.00	73.21
15666	CD1	TYR	C	442	-37.919	-2.644	21.448	1.00	73.11
15667	CE1	TYR	C	442	-36.967	-3.624	21.677	1.00	72.43
15668	CZ	TYR	C	442	-37.289	-4.721	22.452	1.00	72.27
15669	OH	TYR	C	442	-36.352	-5.700	22.686	1.00	71.61
15670	CE2	TYR	C	442	-38.550	-4.842	22.997	1.00	72.28
15671	CD2	TYR	C	442	-39.494	-3.859	22.763	1.00	72.75
15672	C	TYR	C	442	-40.649	-1.102	24.159	1.00	72.68
15673	O	TYR	C	442	-39.770	-1.547	24.893	1.00	72.50
15674	N	GLN	C	443	-41.929	-1.048	24.515	1.00	71.97
15675	CA	GLN	C	443	-42.377	-1.569	25.801	1.00	71.05
15676	CB	GLN	C	443	-43.354	-0.612	26.496	1.00	71.05
15677	CG	GLN	C	443	-44.812	-0.793	26.104	1.00	71.02
15678	CD	GLN	C	443	-45.784	-0.282	27.161	1.00	70.77
15679	OE1	GLN	C	443	-45.447	-0.204	28.341	1.00	70.62
15680	NE2	GLN	C	443	-46.994	0.051	26.738	1.00	71.00
15681	C	GLN	C	443	-43.015	-2.930	25.598	1.00	70.47
15682	O	GLN	C	443	-43.828	-3.125	24.703	1.00	70.56
15683	N	LEU	C	444	-42.612	-3.890	26.411	1.00	69.79
15684	CA	LEU	C	444	-43.178	-5.213	26.315	1.00	68.88
15685	CB	LEU	C	444	-42.095	-6.271	26.453	1.00	68.90
15686	CG	LEU	C	444	-41.491	-6.683	25.119	1.00	69.17
15687	CD1	LEU	C	444	-42.600	-7.053	24.141	1.00	69.11
15688	CD2	LEU	C	444	-40.524	-7.838	25.312	1.00	69.33
15689	C	LEU	C	444	-44.214	-5.376	27.399	1.00	68.42
15690	O	LEU	C	444	-44.084	-4.823	28.489	1.00	68.41
15691	N	ARG	C	445	-45.258	-6.124	27.089	1.00	67.87
15692	CA	ARG	C	445	-46.306	-6.379	28.054	1.00	67.18
15693	CB	ARG	C	445	-47.481	-5.440	27.816	1.00	67.37
15694	CG	ARG	C	445	-48.838	-6.033	28.162	1.00	68.00
15695	CD	ARG	C	445	-49.992	-5.085	27.891	1.00	68.96
15696	NE	ARG	C	445	-51.213	-5.778	27.495	1.00	69.80
15697	CZ	ARG	C	445	-52.236	-5.186	26.893	1.00	70.42
15698	NH1	ARG	C	445	-53.311	-5.890	26.566	1.00	71.22



# FIGURE 3 KV

A	B	C	D	E	F	G	H	I	J
15699	NH2	ARG	C	445	-52.186	-3.887	26.617	1.00	70.18
15700	C	ARG	C	445	-46.749	-7.810	27.905	1.00	66.40
15701	O	ARG	C	445	-47.305	-8.182	26.878	1.00	66.41
15702	N	CYS	C	446	-46.458	-8.630	28.906	1.00	65.62
15703	CA	CYS	C	446	-46.937	-10.002	28.883	1.00	64.89
15704	CB	CYS	C	446	-45.875	-10.995	29.358	1.00	64.87
15705	SG	CYS	C	446	-45.775	-11.242	31.141	1.00	64.37
15706	C	CYS	C	446	-48.173	-10.040	29.764	1.00	64.31
15707	O	CYS	C	446	-48.257	-9.318	30.759	1.00	64.14
15708	N	SER	C	447	-49.133	-10.874	29.394	1.00	63.60
15709	CA	SER	C	447	-50.404	-10.907	30.101	1.00	62.98
15710	CB	SER	C	447	-51.554	-10.828	29.096	1.00	62.83
15711	OG	SER	C	447	-51.335	-9.777	28.172	1.00	62.79
15712	C	SER	C	447	-50.557	-12.146	30.954	1.00	62.53
15713	O	SER	C	447	-51.598	-12.349	31.572	1.00	62.13
15714	N	GLY	C	448	-49.516	-12.971	30.986	1.00	62.30
15715	CA	GLY	C	448	-49.543	-14.203	31.753	1.00	62.09
15716	C	GLY	C	448	-48.497	-15.176	31.252	1.00	62.13
15717	O	GLY	C	448	-47.730	-14.849	30.345	1.00	62.20
15718	N	PRO	C	449	-48.485	-16.389	31.798	1.00	62.06
15719	CA	PRO	C	449	-49.471	-16.837	32.792	1.00	61.94
15720	CB	PRO	C	449	-49.279	-18.354	32.816	1.00	61.99
15721	CG	PRO	C	449	-47.884	-18.576	32.356	1.00	62.06
15722	CD	PRO	C	449	-47.495	-17.429	31.480	1.00	61.96
15723	C	PRO	C	449	-49.269	-16.287	34.191	1.00	61.82
15724	O	PRO	C	449	-50.119	-16.515	35.047	1.00	61.98
15725	N	GLY	C	450	-48.169	-15.587	34.429	1.00	61.77
15726	CA	GLY	C	450	-47.941	-14.994	35.728	1.00	61.81
15727	C	GLY	C	450	-48.527	-13.603	35.696	1.00	62.02
15728	O	GLY	C	450	-49.132	-13.208	34.701	1.00	62.11
15729	N	LEU	C	451	-48.361	-12.853	36.776	1.00	62.12
15730	CA	LEU	C	451	-48.865	-11.495	36.807	1.00	62.43
15731	CB	LEU	C	451	-48.475	-10.814	38.111	1.00	62.43
15732	CG	LEU	C	451	-49.483	-11.010	39.237	1.00	62.12
15733	CD1	LEU	C	451	-50.198	-12.339	39.086	1.00	61.65
15734	CD2	LEU	C	451	-48.799	-10.894	40.595	1.00	62.13
15735	C	LEU	C	451	-48.287	-10.744	35.622	1.00	62.97
15736	O	LEU	C	451	-47.156	-11.006	35.216	1.00	63.03
15737	N	PRO	C	452	-49.062	-9.829	35.050	1.00	63.39
15738	CA	PRO	C	452	-48.603	-9.061	33.894	1.00	63.77
15739	CB	PRO	C	452	-49.781	-8.138	33.597	1.00	63.68
15740	CG	PRO	C	452	-50.941	-8.821	34.201	1.00	63.81
15741	CD	PRO	C	452	-50.423	-9.453	35.457	1.00	63.48
15742	C	PRO	C	452	-47.373	-8.255	34.269	1.00	64.20
15743	O	PRO	C	452	-47.258	-7.794	35.405	1.00	64.11
15744	N	LEU	C	453	-46.463	-8.105	33.317	1.00	64.70
15745	CA	LEU	C	453	-45.218	-7.400	33.545	1.00	65.40
15746	CB	LEU	C	453	-44.075	-8.404	33.714	1.00	65.43
15747	CG	LEU	C	453	-42.643	-8.059	33.305	1.00	65.83
15748	CD1	LEU	C	453	-42.512	-7.958	31.783	1.00	66.51
15749	CD2	LEU	C	453	-41.709	-9.131	33.827	1.00	66.40

FIGURE 3 KW

A	B	C	D	E	F	G	H	I	J
15750	C	LEU	C	453	-44.947	-6.429	32.409	1.00	65.83
15751	O	LEU	C	453	-45.025	-6.778	31.231	1.00	65.92
15752	N	TYR	C	454	-44.629	-5.200	32.775	1.00	66.42
15753	CA	TYR	C	454	-44.380	-4.169	31.796	1.00	67.31
15754	CB	TYR	C	454	-45.315	-2.997	32.064	1.00	67.28
15755	CG	TYR	C	454	-46.767	-3.315	31.791	1.00	67.79
15756	CD1	TYR	C	454	-47.348	-2.994	30.569	1.00	67.78
15757	CE1	TYR	C	454	-48.672	-3.278	30.309	1.00	68.12
15758	CZ	TYR	C	454	-49.438	-3.901	31.272	1.00	68.30
15759	OH	TYR	C	454	-50.760	-4.182	31.007	1.00	67.89
15760	CE2	TYR	C	454	-48.885	-4.237	32.493	1.00	68.45
15761	CD2	TYR	C	454	-47.556	-3.942	32.747	1.00	68.05
15762	C	TYR	C	454	-42.920	-3.730	31.839	1.00	67.94
15763	O	TYR	C	454	-42.432	-3.270	32.869	1.00	68.23
15764	N	THR	C	455	-42.224	-3.881	30.715	1.00	68.86
15765	CA	THR	C	455	-40.806	-3.535	30.625	1.00	69.72
15766	CB	THR	C	455	-39.944	-4.807	30.654	1.00	69.58
15767	OG1	THR	C	455	-40.429	-5.742	29.680	1.00	69.76
15768	CG2	THR	C	455	-40.113	-5.545	31.972	1.00	69.53
15769	C	THR	C	455	-40.489	-2.763	29.353	1.00	70.50
15770	O	THR	C	455	-40.896	-3.161	28.265	1.00	70.60
15771	N	LEU	C	456	-39.751	-1.667	29.494	1.00	71.35
15772	CA	LEU	C	456	-39.348	-0.865	28.347	1.00	72.19
15773	CB	LEU	C	456	-39.356	0.618	28.705	1.00	72.26
15774	CG	LEU	C	456	-39.810	1.623	27.644	1.00	72.39
15775	CD1	LEU	C	456	-39.333	3.017	28.027	1.00	73.23
15776	CD2	LEU	C	456	-39.311	1.258	26.263	1.00	72.51
15777	C	LEU	C	456	-37.943	-1.268	27.931	1.00	72.89
15778	O	LEU	C	456	-37.017	-1.235	28.743	1.00	72.93
15779	N	HIS	C	457	-37.795	-1.652	26.667	1.00	73.68
15780	CA	HIS	C	457	-36.510	-2.063	26.121	1.00	74.39
15781	CB	HIS	C	457	-36.627	-3.454	25.503	1.00	74.53
15782	CG	HIS	C	457	-37.266	-4.468	26.400	1.00	75.22
15783	ND1	HIS	C	457	-36.673	-5.677	26.697	1.00	75.59
15784	CE1	HIS	C	457	-37.460	-6.366	27.504	1.00	75.51
15785	NE2	HIS	C	457	-38.546	-5.650	27.736	1.00	75.75
15786	CD2	HIS	C	457	-38.451	-4.460	27.056	1.00	75.56
15787	C	HIS	C	457	-36.039	-1.082	25.050	1.00	74.92
15788	O	HIS	C	457	-36.765	-0.161	24.683	1.00	74.94
15789	N	SER	C	458	-34.818	-1.288	24.556	1.00	75.63
15790	CA	SER	C	458	-34.252	-0.470	23.482	1.00	76.21
15791	CB	SER	C	458	-32.946	0.179	23.927	1.00	76.35
15792	OG	SER	C	458	-31.836	-0.522	23.385	1.00	76.31
15793	C	SER	C	458	-33.969	-1.353	22.277	1.00	76.66
15794	O	SER	C	458	-33.361	-2.410	22.415	1.00	76.64
15795	N	SER	C	459	-34.384	-0.906	21.094	1.00	77.37
15796	CA	SER	C	459	-34.227	-1.704	19.880	1.00	78.06
15797	CB	SER	C	459	-35.029	-1.100	18.723	1.00	78.08
15798	OG	SER	C	459	-34.251	-0.175	17.978	1.00	78.13
15799	C	SER	C	459	-32.772	-1.899	19.455	1.00	78.51
15800	O	SER	C	459	-32.366	-3.009	19.113	1.00	78.48

FIGURE 3 KX

A	B	C	D	E	F	G	H	I	J
15801	N	VAL	C	460	-31.998	-0.819	19.478	1.00	79.13
15802	CA	VAL	C	460	-30.602	-0.858	19.040	1.00	79.90
15803	CB	VAL	C	460	-29.736	0.163	19.792	1.00	79.91
15804	CG1	VAL	C	460	-28.318	0.173	19.222	1.00	80.28
15805	CG2	VAL	C	460	-30.360	1.548	19.718	1.00	80.14
15806	C	VAL	C	460	-29.963	-2.238	19.166	1.00	80.28
15807	O	VAL	C	460	-29.514	-2.810	18.176	1.00	80.25
15808	N	ASN	C	461	-29.925	-2.769	20.383	1.00	80.95
15809	CA	ASN	C	461	-29.330	-4.082	20.619	1.00	81.65
15810	CB	ASN	C	461	-28.024	-3.933	21.393	1.00	81.78
15811	CG	ASN	C	461	-28.135	-2.928	22.517	1.00	82.56
15812	OD1	ASN	C	461	-27.865	-1.738	22.333	1.00	83.29
15813	ND2	ASN	C	461	-28.544	-3.399	23.693	1.00	83.11
15814	C	ASN	C	461	-30.259	-5.050	21.353	1.00	81.83
15815	O	ASN	C	461	-29.916	-6.220	21.551	1.00	81.87
15816	N	ASP	C	462	-31.431	-4.553	21.750	1.00	81.95
15817	CA	ASP	C	462	-32.423	-5.352	22.472	1.00	81.99
15818	CB	ASP	C	462	-32.740	-6.648	21.728	1.00	82.05
15819	CG	ASP	C	462	-33.324	-6.399	20.367	1.00	82.51
15820	OD1	ASP	C	462	-33.222	-7.298	19.507	1.00	83.46
15821	OD2	ASP	C	462	-33.898	-5.331	20.064	1.00	83.21
15822	C	ASP	C	462	-31.988	-5.676	23.892	1.00	81.95
15823	O	ASP	C	462	-31.728	-6.836	24.226	1.00	81.98
15824	N	LYS	C	463	-31.902	-4.650	24.726	1.00	81.70
15825	CA	LYS	C	463	-31.552	-4.867	26.118	1.00	81.59
15826	CB	LYS	C	463	-30.126	-4.390	26.423	1.00	81.72
15827	CG	LYS	C	463	-29.991	-2.932	26.824	1.00	82.48
15828	CD	LYS	C	463	-30.056	-2.752	28.339	1.00	83.36
15829	CE	LYS	C	463	-29.847	-1.288	28.725	1.00	84.04
15830	NZ	LYS	C	463	-30.056	-1.042	30.183	1.00	84.21
15831	C	LYS	C	463	-32.585	-4.194	27.005	1.00	81.24
15832	O	LYS	C	463	-33.152	-3.157	26.652	1.00	81.27
15833	N	GLY	C	464	-32.840	-4.803	28.152	1.00	80.82
15834	CA	GLY	C	464	-33.824	-4.280	29.072	1.00	80.31
15835	C	GLY	C	464	-33.284	-3.134	29.892	1.00	79.81
15836	O	GLY	C	464	-32.374	-3.321	30.698	1.00	79.89
15837	N	LEU	C	465	-33.841	-1.947	29.676	1.00	79.34
15838	CA	LEU	C	465	-33.459	-0.775	30.444	1.00	78.86
15839	CB	LEU	C	465	-34.036	0.504	29.839	1.00	78.85
15840	CG	LEU	C	465	-34.193	0.662	28.329	1.00	78.87
15841	CD1	LEU	C	465	-34.575	2.102	28.023	1.00	78.99
15842	CD2	LEU	C	465	-32.930	0.278	27.581	1.00	79.34
15843	C	LEU	C	465	-33.998	-0.938	31.854	1.00	78.63
15844	O	LEU	C	465	-33.233	-1.099	32.812	1.00	78.68
15845	N	ARG	C	466	-35.322	-0.901	31.986	1.00	78.11
15846	CA	ARG	C	466	-35.924	-1.029	33.305	1.00	77.56
15847	CB	ARG	C	466	-36.070	0.343	33.963	1.00	77.73
15848	CG	ARG	C	466	-36.849	1.341	33.141	1.00	78.08
15849	CD	ARG	C	466	-36.820	2.753	33.701	1.00	78.74
15850	NE	ARG	C	466	-36.959	3.743	32.637	1.00	79.35
15851	CZ	ARG	C	466	-36.049	3.957	31.696	1.00	79.03

FIGURE 3 KY

A	B	C	D	E	F	G	H	I	J
15852	NH1	ARG	C	466	-36.264	4.874	30.764	1.00	79.06
15853	NH2	ARG	C	466	-34.922	3.257	31.683	1.00	78.58
15854	C	ARG	C	466	-37.263	-1.734	33.344	1.00	77.07
15855	O	ARG	C	466	-37.818	-2.141	32.322	1.00	77.09
15856	N	VAL	C	467	-37.760	-1.873	34.565	1.00	76.41
15857	CA	VAL	C	467	-39.040	-2.484	34.836	1.00	75.67
15858	CB	VAL	C	467	-38.961	-3.345	36.106	1.00	75.78
15859	CG1	VAL	C	467	-40.344	-3.819	36.532	1.00	75.88
15860	CG2	VAL	C	467	-38.010	-4.527	35.892	1.00	76.01
15861	C	VAL	C	467	-40.032	-1.355	35.054	1.00	75.09
15862	O	VAL	C	467	-39.787	-0.464	35.864	1.00	75.04
15863	N	LEU	C	468	-41.142	-1.382	34.321	1.00	74.19
15864	CA	LEU	C	468	-42.159	-0.344	34.443	1.00	73.37
15865	CB	LEU	C	468	-42.886	-0.161	33.116	1.00	73.36
15866	CG	LEU	C	468	-42.007	0.456	32.037	1.00	73.52
15867	CD1	LEU	C	468	-42.744	0.538	30.717	1.00	73.69
15868	CD2	LEU	C	468	-41.547	1.832	32.497	1.00	74.21
15869	C	LEU	C	468	-43.153	-0.684	35.541	1.00	72.83
15870	O	LEU	C	468	-43.418	0.118	36.435	1.00	72.50
15871	N	GLU	C	469	-43.711	-1.883	35.456	1.00	72.20
15872	CA	GLU	C	469	-44.636	-2.365	36.464	1.00	71.43
15873	CB	GLU	C	469	-46.070	-1.983	36.107	1.00	71.50
15874	CG	GLU	C	469	-47.100	-2.496	37.094	1.00	71.46
15875	CD	GLU	C	469	-46.816	-2.036	38.505	1.00	71.67
15876	OE1	GLU	C	469	-46.582	-2.900	39.375	1.00	71.29
15877	OE2	GLU	C	469	-46.827	-0.809	38.742	1.00	72.31
15878	C	GLU	C	469	-44.481	-3.873	36.546	1.00	70.80
15879	O	GLU	C	469	-44.445	-4.551	35.526	1.00	70.65
15880	N	ASP	C	470	-44.364	-4.398	37.757	1.00	70.21
15881	CA	ASP	C	470	-44.177	-5.830	37.921	1.00	69.68
15882	CB	ASP	C	470	-42.830	-6.124	38.580	1.00	69.85
15883	CG	ASP	C	470	-42.690	-5.476	39.945	1.00	70.85
15884	OD1	ASP	C	470	-41.553	-5.454	40.467	1.00	71.98
15885	OD2	ASP	C	470	-43.650	-4.968	40.573	1.00	71.66
15886	C	ASP	C	470	-45.312	-6.432	38.726	1.00	68.96
15887	O	ASP	C	470	-45.356	-7.641	38.952	1.00	68.81
15888	N	ASN	C	471	-46.223	-5.568	39.159	1.00	68.21
15889	CA	ASN	C	471	-47.381	-5.977	39.942	1.00	67.52
15890	CB	ASN	C	471	-48.323	-6.862	39.118	1.00	67.33
15891	CG	ASN	C	471	-49.373	-6.053	38.364	1.00	66.65
15892	OD1	ASN	C	471	-50.247	-5.433	38.976	1.00	65.67
15893	ND2	ASN	C	471	-49.287	-6.051	37.034	1.00	64.42
15894	C	ASN	C	471	-47.021	-6.643	41.261	1.00	67.42
15895	O	ASN	C	471	-47.802	-7.423	41.806	1.00	67.41
15896	N	SER	C	472	-45.839	-6.325	41.779	1.00	67.15
15897	CA	SER	C	472	-45.422	-6.872	43.059	1.00	66.97
15898	CB	SER	C	472	-44.074	-6.287	43.496	1.00	67.26
15899	OG	SER	C	472	-44.206	-4.939	43.929	1.00	67.21
15900	C	SER	C	472	-46.507	-6.570	44.093	1.00	66.57
15901	O	SER	C	472	-46.830	-7.413	44.930	1.00	66.63
15902	N	ALA	C	473	-47.076	-5.369	44.022	1.00	65.88

FIGURE 3 KZ

A	B	C	D	E	F	G	H	I	J
15903	CA	ALA	C	473	-48.153	-4.986	44.929	1.00	65.34
15904	CB	ALA	C	473	-48.726	-3.633	44.537	1.00	65.11
15905	C	ALA	C	473	-49.256	-6.046	44.945	1.00	65.07
15906	O	ALA	C	473	-49.640	-6.545	46.007	1.00	64.90
15907	N	LEU	C	474	-49.754	-6.384	43.758	1.00	64.62
15908	CA	LEU	C	474	-50.807	-7.379	43.619	1.00	64.36
15909	CB	LEU	C	474	-51.247	-7.500	42.160	1.00	64.23
15910	CG	LEU	C	474	-52.333	-8.548	41.927	1.00	64.01
15911	CD1	LEU	C	474	-53.688	-7.987	42.297	1.00	64.03
15912	CD2	LEU	C	474	-52.330	-9.023	40.495	1.00	64.25
15913	C	LEU	C	474	-50.307	-8.725	44.108	1.00	64.22
15914	O	LEU	C	474	-51.001	-9.431	44.843	1.00	64.04
15915	N	ASP	C	475	-49.094	-9.068	43.690	1.00	64.12
15916	CA	ASP	C	475	-48.474	-10.321	44.079	1.00	64.14
15917	CB	ASP	C	475	-47.013	-10.344	43.627	1.00	64.15
15918	CG	ASP	C	475	-46.445	-11.744	43.570	1.00	64.36
15919	OD1	ASP	C	475	-45.977	-12.156	42.483	1.00	63.82
15920	OD2	ASP	C	475	-46.423	-12.504	44.563	1.00	64.34
15921	C	ASP	C	475	-48.565	-10.495	45.590	1.00	64.15
15922	O	ASP	C	475	-48.811	-11.593	46.086	1.00	64.06
15923	N	LYS	C	476	-48.396	-9.393	46.313	1.00	64.14
15924	CA	LYS	C	476	-48.389	-9.428	47.765	1.00	64.39
15925	CB	LYS	C	476	-47.965	-8.075	48.336	1.00	64.59
15926	CG	LYS	C	476	-47.947	-8.027	49.855	1.00	66.02
15927	CD	LYS	C	476	-47.125	-6.847	50.368	1.00	68.48
15928	CE	LYS	C	476	-45.676	-6.905	49.867	1.00	69.19
15929	NZ	LYS	C	476	-44.857	-5.764	50.383	1.00	70.07
15930	C	LYS	C	476	-49.722	-9.847	48.361	1.00	64.23
15931	O	LYS	C	476	-49.774	-10.760	49.186	1.00	63.98
15932	N	MET	C	477	-50.800	-9.182	47.958	1.00	64.16
15933	CA	MET	C	477	-52.107	-9.517	48.516	1.00	63.91
15934	CB	MET	C	477	-53.136	-8.409	48.273	1.00	64.19
15935	CG	MET	C	477	-53.177	-7.856	46.863	1.00	65.27
15936	SD	MET	C	477	-53.849	-6.168	46.854	1.00	66.51
15937	CE	MET	C	477	-54.919	-6.231	48.286	1.00	67.00
15938	C	MET	C	477	-52.610	-10.877	48.047	1.00	63.33
15939	O	MET	C	477	-53.440	-11.492	48.709	1.00	63.47
15940	N	LEU	C	478	-52.079	-11.359	46.930	1.00	62.62
15941	CA	LEU	C	478	-52.457	-12.668	46.419	1.00	62.15
15942	CB	LEU	C	478	-52.065	-12.807	44.947	1.00	62.00
15943	CG	LEU	C	478	-53.148	-12.549	43.894	1.00	61.31
15944	CD1	LEU	C	478	-52.507	-12.236	42.565	1.00	60.38
15945	CD2	LEU	C	478	-54.119	-11.432	44.297	1.00	60.55
15946	C	LEU	C	478	-51.859	-13.806	47.249	1.00	62.27
15947	O	LEU	C	478	-52.221	-14.973	47.074	1.00	62.11
15948	N	GLN	C	479	-50.941	-13.467	48.150	1.00	62.31
15949	CA	GLN	C	479	-50.316	-14.468	49.010	1.00	62.41
15950	CB	GLN	C	479	-49.098	-13.887	49.719	1.00	62.77
15951	CG	GLN	C	479	-47.967	-13.458	48.804	1.00	63.97
15952	CD	GLN	C	479	-47.054	-12.472	49.497	1.00	65.85
15953	OE1	GLN	C	479	-47.482	-11.786	50.429	1.00	66.54

FIGURE 3 LA

A	B	C	D	E	F	G	H	I	J
15954	NE2	GLN	C	479	-45.795	-12.403	49.061	1.00	66.37
15955	C	GLN	C	479	-51.320	-14.933	50.045	1.00	62.03
15956	O	GLN	C	479	-51.306	-16.084	50.469	1.00	62.09
15957	N	ASN	C	480	-52.184	-14.015	50.459	1.00	61.68
15958	CA	ASN	C	480	-53.247	-14.328	51.397	1.00	61.21
15959	CB	ASN	C	480	-53.958	-13.047	51.833	1.00	61.41
15960	CG	ASN	C	480	-53.719	-12.709	53.288	1.00	62.10
15961	OD1	ASN	C	480	-53.740	-11.536	53.674	1.00	62.88
15962	ND2	ASN	C	480	-53.501	-13.736	54.111	1.00	61.27
15963	C	ASN	C	480	-54.283	-15.271	50.798	1.00	60.56
15964	O	ASN	C	480	-54.806	-16.145	51.482	1.00	60.74
15965	N	VAL	C	481	-54.569	-15.111	49.513	1.00	59.62
15966	CA	VAL	C	481	-55.651	-15.887	48.912	1.00	58.54
15967	CB	VAL	C	481	-56.485	-15.018	47.945	1.00	58.59
15968	CG1	VAL	C	481	-55.593	-14.052	47.191	1.00	58.52
15969	CG2	VAL	C	481	-57.285	-15.887	46.999	1.00	58.15
15970	C	VAL	C	481	-55.289	-17.213	48.234	1.00	57.70
15971	O	VAL	C	481	-54.312	-17.315	47.495	1.00	57.10
15972	N	GLN	C	482	-56.111	-18.221	48.507	1.00	56.94
15973	CA	GLN	C	482	-56.004	-19.522	47.866	1.00	56.22
15974	CB	GLN	C	482	-56.893	-20.542	48.580	1.00	56.27
15975	CG	GLN	C	482	-56.552	-20.768	50.044	1.00	56.54
15976	CD	GLN	C	482	-57.309	-21.947	50.642	1.00	57.87
15977	OE1	GLN	C	482	-56.993	-23.102	50.357	1.00	58.06
15978	NE2	GLN	C	482	-58.308	-21.657	51.472	1.00	58.38
15979	C	GLN	C	482	-56.438	-19.381	46.408	1.00	55.57
15980	O	GLN	C	482	-57.605	-19.551	46.068	1.00	55.85
15981	N	MET	C	483	-55.487	-19.071	45.544	1.00	54.50
15982	CA	MET	C	483	-55.784	-18.836	44.150	1.00	53.23
15983	CB	MET	C	483	-54.779	-17.845	43.570	1.00	53.29
15984	CG	MET	C	483	-54.907	-16.464	44.187	1.00	53.22
15985	SD	MET	C	483	-56.530	-15.752	43.876	1.00	52.60
15986	CE	MET	C	483	-56.296	-15.080	42.219	1.00	53.38
15987	C	MET	C	483	-55.823	-20.101	43.310	1.00	52.57
15988	O	MET	C	483	-55.125	-21.074	43.579	1.00	52.37
15989	N	PRO	C	484	-56.669	-20.074	42.291	1.00	51.80
15990	CA	PRO	C	484	-56.800	-21.187	41.358	1.00	51.37
15991	CB	PRO	C	484	-57.964	-20.735	40.471	1.00	51.37
15992	CG	PRO	C	484	-57.908	-19.250	40.546	1.00	50.94
15993	CD	PRO	C	484	-57.598	-18.972	41.973	1.00	51.64
15994	C	PRO	C	484	-55.533	-21.275	40.525	1.00	51.05
15995	O	PRO	C	484	-54.730	-20.353	40.549	1.00	50.71
15996	N	SER	C	485	-55.346	-22.367	39.801	1.00	51.12
15997	CA	SER	C	485	-54.179	-22.481	38.945	1.00	51.50
15998	CB	SER	C	485	-53.292	-23.659	39.358	1.00	51.29
15999	OG	SER	C	485	-53.758	-24.877	38.803	1.00	51.36
16000	C	SER	C	485	-54.669	-22.643	37.525	1.00	51.92
16001	O	SER	C	485	-55.870	-22.675	37.284	1.00	51.86
16002	N	LYS	C	486	-53.748	-22.766	36.579	1.00	52.76
16003	CA	LYS	C	486	-54.147	-22.853	35.185	1.00	53.23
16004	CB	LYS	C	486	-53.849	-21.528	34.483	1.00	52.93

FIGURE 3 LB

A	B	C	D	E	F	G	H	I	J
16005	CG	LYS	C	486	-55.017	-20.990	33.676	1.00	53.08
16006	CD	LYS	C	486	-54.749	-20.868	32.183	1.00	50.23
16007	CE	LYS	C	486	-55.425	-19.603	31.673	1.00	47.65
16008	NZ	LYS	C	486	-55.334	-19.383	30.214	1.00	47.00
16009	C	LYS	C	486	-53.442	-23.972	34.457	1.00	53.74
16010	O	LYS	C	486	-52.215	-24.070	34.477	1.00	53.99
16011	N	LYS	C	487	-54.222	-24.826	33.819	1.00	54.39
16012	CA	LYS	C	487	-53.658	-25.861	32.984	1.00	55.08
16013	CB	LYS	C	487	-54.298	-27.215	33.276	1.00	55.38
16014	CG	LYS	C	487	-54.163	-28.228	32.130	1.00	56.35
16015	CD	LYS	C	487	-53.045	-29.243	32.348	1.00	57.73
16016	CE	LYS	C	487	-53.613	-30.628	32.640	1.00	58.57
16017	NZ	LYS	C	487	-52.613	-31.699	32.343	1.00	58.44
16018	C	LYS	C	487	-53.914	-25.465	31.541	1.00	55.57
16019	O	LYS	C	487	-55.055	-25.266	31.133	1.00	55.38
16020	N	LEU	C	488	-52.842	-25.308	30.782	1.00	56.17
16021	CA	LEU	C	488	-52.954	-25.045	29.362	1.00	56.86
16022	CB	LEU	C	488	-52.169	-23.798	28.971	1.00	56.87
16023	CG	LEU	C	488	-52.661	-23.069	27.720	1.00	56.32
16024	CD1	LEU	C	488	-51.490	-22.755	26.814	1.00	54.85
16025	CD2	LEU	C	488	-53.696	-23.886	26.991	1.00	55.36
16026	C	LEU	C	488	-52.338	-26.249	28.697	1.00	57.42
16027	O	LEU	C	488	-51.132	-26.465	28.772	1.00	57.62
16028	N	ASP	C	489	-53.165	-27.057	28.061	1.00	58.31
16029	CA	ASP	C	489	-52.663	-28.255	27.426	1.00	59.02
16030	CB	ASP	C	489	-52.723	-29.427	28.401	1.00	59.14
16031	CG	ASP	C	489	-51.569	-30.384	28.223	1.00	59.63
16032	OD1	ASP	C	489	-50.608	-30.292	29.014	1.00	59.73
16033	OD2	ASP	C	489	-51.529	-31.243	27.314	1.00	60.12
16034	C	ASP	C	489	-53.513	-28.543	26.215	1.00	59.39
16035	O	ASP	C	489	-54.373	-27.752	25.854	1.00	59.48
16036	N	PHE	C	490	-53.278	-29.681	25.585	1.00	60.01
16037	CA	PHE	C	490	-54.052	-30.028	24.413	1.00	60.71
16038	CB	PHE	C	490	-53.238	-29.782	23.139	1.00	60.85
16039	CG	PHE	C	490	-52.154	-30.798	22.909	1.00	61.45
16040	CD1	PHE	C	490	-52.440	-32.010	22.294	1.00	61.76
16041	CE1	PHE	C	490	-51.442	-32.953	22.082	1.00	61.88
16042	CZ	PHE	C	490	-50.147	-32.689	22.488	1.00	61.87
16043	CE2	PHE	C	490	-49.850	-31.482	23.106	1.00	62.01
16044	CD2	PHE	C	490	-50.851	-30.546	23.313	1.00	61.78
16045	C	PHE	C	490	-54.474	-31.477	24.466	1.00	60.98
16046	O	PHE	C	490	-53.859	-32.294	25.157	1.00	61.02
16047	N	ILE	C	491	-55.559	-31.769	23.760	1.00	61.36
16048	CA	ILE	C	491	-56.009	-33.128	23.546	1.00	61.73
16049	CB	ILE	C	491	-57.454	-33.356	24.026	1.00	61.89
16050	CD1	ILE	C	491	-58.450	-32.595	23.145	1.00	61.68
16051	CD1	ILE	C	491	-59.860	-33.123	23.241	1.00	61.32
16052	CG2	ILE	C	491	-57.611	-32.989	25.490	1.00	61.93
16053	C	ILE	C	491	-55.945	-33.280	22.042	1.00	62.11
16054	O	ILE	C	491	-55.856	-32.290	21.311	1.00	61.87
16055	N	ILE	C	492	-55.980	-34.514	21.569	1.00	62.65

FIGURE 3 LC

A	B	C	D	E	F	G	H	I	J
16056	CA	ILE	C	492	-55.924	-34.732	20.141	1.00	63.29
16057	CB	ILE	C	492	-54.531	-35.289	19.712	1.00	63.35
16058	CG1	ILE	C	492	-54.568	-35.859	18.290	1.00	63.18
16059	CD1	ILE	C	492	-55.163	-37.252	18.191	1.00	63.21
16060	CG2	ILE	C	492	-54.045	-36.338	20.688	1.00	64.14
16061	C	ILE	C	492	-57.069	-35.617	19.690	1.00	63.51
16062	O	ILE	C	492	-57.331	-36.664	20.282	1.00	63.49
16063	N	LEU	C	493	-57.776	-35.155	18.665	1.00	63.86
16064	CA	LEU	C	493	-58.839	-35.926	18.044	1.00	64.34
16065	CB	LEU	C	493	-60.210	-35.294	18.293	1.00	64.32
16066	CG	LEU	C	493	-60.434	-34.562	19.613	1.00	64.33
16067	CD1	LEU	C	493	-59.652	-33.272	19.614	1.00	64.78
16068	CD2	LEU	C	493	-61.912	-34.273	19.822	1.00	64.93
16069	C	LEU	C	493	-58.536	-35.939	16.556	1.00	64.54
16070	O	LEU	C	493	-58.189	-34.904	15.978	1.00	64.41
16071	N	ASN	C	494	-58.635	-37.118	15.948	1.00	64.97
16072	CA	ASN	C	494	-58.389	-37.277	14.517	1.00	65.48
16073	CB	ASN	C	494	-59.589	-36.784	13.696	1.00	65.63
16074	CG	ASN	C	494	-60.760	-37.758	13.723	1.00	66.99
16075	OD1	ASN	C	494	-61.556	-37.826	12.775	1.00	68.83
16076	ND2	ASN	C	494	-60.870	-38.520	14.806	1.00	67.19
16077	C	ASN	C	494	-57.116	-36.590	14.036	1.00	65.35
16078	O	ASN	C	494	-57.177	-35.604	13.302	1.00	65.52
16079	N	GLU	C	495	-55.967	-37.100	14.470	1.00	65.25
16080	CA	GLU	C	495	-54.674	-36.585	14.020	1.00	64.93
16081	CB	GLU	C	495	-54.560	-36.705	12.491	1.00	65.49
16082	CG	GLU	C	495	-53.807	-37.941	12.017	1.00	67.35
16083	CD	GLU	C	495	-54.299	-38.479	10.680	1.00	69.98
16084	OE1	GLU	C	495	-55.497	-38.832	10.576	1.00	70.27
16085	OE2	GLU	C	495	-53.481	-38.574	9.733	1.00	71.37
16086	C	GLU	C	495	-54.387	-35.149	14.438	1.00	64.05
16087	O	GLU	C	495	-53.246	-34.695	14.370	1.00	63.96
16088	N	THR	C	496	-55.413	-34.426	14.870	1.00	62.94
16089	CA	THR	C	496	-55.225	-33.013	15.194	1.00	61.53
16090	CB	THR	C	496	-56.283	-32.162	14.478	1.00	61.59
16091	OG1	THR	C	496	-57.185	-33.028	13.778	1.00	61.93
16092	CG2	THR	C	496	-55.650	-31.363	13.367	1.00	61.66
16093	C	THR	C	496	-55.244	-32.708	16.676	1.00	60.16
16094	O	THR	C	496	-56.003	-33.313	17.428	1.00	60.01
16095	N	LYS	C	497	-54.392	-31.784	17.105	1.00	58.57
16096	CA	LYS	C	497	-54.466	-31.359	18.494	1.00	57.26
16097	CB	LYS	C	497	-53.105	-31.245	19.178	1.00	57.60
16098	CG	LYS	C	497	-52.059	-30.444	18.445	1.00	59.58
16099	CD	LYS	C	497	-50.898	-31.345	18.064	1.00	62.33
16100	CE	LYS	C	497	-49.588	-30.719	18.490	1.00	63.93
16101	NZ	LYS	C	497	-49.605	-29.244	18.260	1.00	64.60
16102	C	LYS	C	497	-55.251	-30.075	18.636	1.00	55.50
16103	O	LYS	C	497	-55.053	-29.108	17.910	1.00	55.06
16104	N	PHE	C	498	-56.177	-30.098	19.573	1.00	53.90
16105	CA	PHE	C	498	-56.971	-28.938	19.888	1.00	52.01
16106	CB	PHE	C	498	-58.442	-29.255	19.716	1.00	51.89



FIGURE 3 LD

A	B	C	D	E	F	G	H	I	J
16107	CG	PHE	C	536	-58.820	-29.570	18.303	1.00	51.20
16108	CD1	PHE	C	536	-59.215	-28.558	17.436	1.00	50.32
16109	CE1	PHE	C	536	-59.564	-28.837	16.145	1.00	49.58
16110	CZ	PHE	C	536	-59.519	-30.143	15.689	1.00	50.88
16111	CE2	PHE	C	536	-59.118	-31.164	16.545	1.00	50.61
16112	CD2	PHE	C	536	-58.773	-30.872	17.837	1.00	50.35
16113	C	PHE	C	536	-56.645	-28.589	21.318	1.00	51.06
16114	O	PHE	C	536	-56.639	-29.448	22.199	1.00	50.81
16115	N	TRP	C	537	-56.354	-27.323	21.544	1.00	49.84
16116	CA	TRP	C	537	-55.939	-26.886	22.856	1.00	48.82
16117	CB	TRP	C	537	-55.087	-25.628	22.733	1.00	48.86
16118	CG	TRP	C	537	-53.770	-25.927	22.082	1.00	49.76
16119	CD1	TRP	C	537	-53.523	-26.076	20.746	1.00	49.81
16120	NE1	TRP	C	537	-52.193	-26.358	20.541	1.00	49.80
16121	CE2	TRP	C	537	-51.557	-26.405	21.753	1.00	49.67
16122	CD2	TRP	C	537	-52.521	-26.145	22.745	1.00	49.62
16123	CE3	TRP	C	537	-52.115	-26.130	24.082	1.00	50.04
16124	CZ3	TRP	C	537	-50.790	-26.379	24.378	1.00	50.07
16125	CH2	TRP	C	537	-49.859	-26.638	23.371	1.00	49.52
16126	CZ2	TRP	C	537	-50.220	-26.658	22.055	1.00	49.89
16127	C	TRP	C	537	-57.089	-26.684	23.825	1.00	48.03
16128	O	TRP	C	537	-58.258	-26.631	23.440	1.00	47.76
16129	N	TYR	C	538	-56.743	-26.607	25.101	1.00	46.94
16130	CA	TYR	C	538	-57.738	-26.376	26.120	1.00	46.15
16131	CB	TYR	C	538	-58.486	-27.665	26.459	1.00	46.44
16132	CG	TYR	C	538	-57.762	-28.647	27.355	1.00	47.01
16133	CD1	TYR	C	538	-57.761	-28.486	28.735	1.00	48.06
16134	CE1	TYR	C	538	-57.120	-29.387	29.560	1.00	49.18
16135	CZ	TYR	C	538	-56.482	-30.483	29.012	1.00	50.19
16136	OH	TYR	C	538	-55.851	-31.385	29.846	1.00	51.72
16137	CE2	TYR	C	538	-56.482	-30.677	27.647	1.00	48.35
16138	CD2	TYR	C	538	-57.123	-29.760	26.828	1.00	47.62
16139	C	TYR	C	538	-57.084	-25.789	27.340	1.00	45.05
16140	O	TYR	C	538	-55.877	-25.884	27.518	1.00	45.34
16141	N	GLN	C	539	-57.883	-25.145	28.166	1.00	43.83
16142	CA	GLN	C	539	-57.379	-24.617	29.407	1.00	42.63
16143	CB	GLN	C	539	-57.179	-23.104	29.341	1.00	42.52
16144	CG	GLN	C	539	-58.457	-22.266	29.213	1.00	41.27
16145	CD	GLN	C	539	-58.184	-20.777	29.426	1.00	39.84
16146	OE1	GLN	C	539	-57.168	-20.256	28.953	1.00	40.31
16147	NE2	GLN	C	539	-59.071	-20.101	30.140	1.00	37.77
16148	C	GLN	C	539	-58.362	-24.992	30.491	1.00	42.38
16149	O	GLN	C	539	-59.542	-25.217	30.224	1.00	42.21
16150	N	MET	C	540	-57.862	-25.117	31.708	1.00	41.97
16151	CA	MET	C	540	-58.732	-25.387	32.824	1.00	41.86
16152	CB	MET	C	540	-58.582	-26.827	33.306	1.00	41.95
16153	CG	MET	C	540	-59.272	-27.858	32.442	1.00	41.45
16154	SD	MET	C	540	-59.183	-29.494	33.189	1.00	42.36
16155	CE	MET	C	540	-60.321	-30.356	32.234	1.00	39.76
16156	C	MET	C	540	-58.357	-24.427	33.922	1.00	41.70
16157	O	MET	C	540	-57.186	-24.155	34.118	1.00	41.42

FIGURE 3 LE

A	B	C	D	E	F	G	H	I	J
16158	N	ILE	C	503	-59.354	-23.856	34.588	1.00	41.92
16159	CA	ILE	C	503	-59.075	-23.054	35.763	1.00	42.01
16160	CB	ILE	C	503	-59.994	-21.826	35.854	1.00	42.23
16161	CG1	ILE	C	503	-59.842	-20.963	34.598	1.00	41.89
16162	CD1	ILE	C	503	-58.508	-20.286	34.511	1.00	42.23
16163	CG2	ILE	C	503	-59.641	-20.979	37.071	1.00	41.21
16164	C	ILE	C	503	-59.308	-24.045	36.887	1.00	42.28
16165	O	ILE	C	503	-60.428	-24.470	37.135	1.00	41.93
16166	N	LEU	C	504	-58.224	-24.470	37.518	1.00	43.06
16167	CA	LEU	C	504	-58.304	-25.502	38.543	1.00	43.54
16168	CB	LEU	C	504	-57.080	-26.414	38.449	1.00	43.91
16169	CG	LEU	C	504	-57.009	-27.263	37.176	1.00	44.82
16170	CD1	LEU	C	504	-55.578	-27.642	36.816	1.00	46.01
16171	CD2	LEU	C	504	-57.869	-28.502	37.314	1.00	45.64
16172	C	LEU	C	504	-58.424	-24.904	39.925	1.00	43.21
16173	O	LEU	C	504	-57.735	-23.959	40.249	1.00	43.43
16174	N	PRO	C	505	-59.333	-25.425	40.731	1.00	43.54
16175	CA	PRO	C	505	-59.478	-24.952	42.112	1.00	44.26
16176	CB	PRO	C	505	-60.571	-25.860	42.676	1.00	44.09
16177	CG	PRO	C	505	-61.320	-26.330	41.467	1.00	43.90
16178	CD	PRO	C	505	-60.299	-26.482	40.392	1.00	43.18
16179	C	PRO	C	505	-58.167	-25.154	42.878	1.00	44.94
16180	O	PRO	C	505	-57.382	-26.049	42.544	1.00	45.02
16181	N	PRO	C	506	-57.916	-24.322	43.876	1.00	45.64
16182	CA	PRO	C	506	-56.703	-24.454	44.689	1.00	46.49
16183	CB	PRO	C	506	-56.956	-23.461	45.832	1.00	46.41
16184	CG	PRO	C	506	-58.453	-23.247	45.787	1.00	45.84
16185	CD	PRO	C	506	-58.762	-23.205	44.329	1.00	45.32
16186	C	PRO	C	506	-56.624	-25.876	45.234	1.00	47.23
16187	O	PRO	C	506	-57.660	-26.522	45.340	1.00	47.08
16188	N	HIS	C	507	-55.425	-26.369	45.540	1.00	48.57
16189	CA	HIS	C	507	-55.282	-27.707	46.120	1.00	49.66
16190	CB	HIS	C	507	-55.917	-27.749	47.509	1.00	49.52
16191	CG	HIS	C	507	-55.425	-26.672	48.420	1.00	50.26
16192	ND1	HIS	C	507	-54.085	-26.392	48.579	1.00	51.83
16193	CE1	HIS	C	507	-53.943	-25.393	49.433	1.00	52.49
16194	NE2	HIS	C	507	-55.145	-25.009	49.827	1.00	52.30
16195	CD2	HIS	C	507	-56.089	-25.793	49.205	1.00	51.46
16196	C	HIS	C	507	-55.918	-28.763	45.243	1.00	50.46
16197	O	HIS	C	507	-56.417	-29.783	45.732	1.00	50.36
16198	N	PHE	C	508	-55.900	-28.505	43.942	1.00	51.48
16199	CA	PHE	C	508	-56.486	-29.414	42.972	1.00	52.60
16200	CB	PHE	C	508	-56.038	-29.044	41.562	1.00	52.56
16201	CG	PHE	C	508	-56.543	-29.978	40.512	1.00	53.20
16202	CD1	PHE	C	508	-57.872	-30.365	40.500	1.00	53.20
16203	CE1	PHE	C	508	-58.347	-31.232	39.547	1.00	52.98
16204	CZ	PHE	C	508	-57.498	-31.727	38.584	1.00	54.15
16205	CR2	PHE	C	508	-56.170	-31.352	38.577	1.00	54.47
16206	CD2	PHE	C	508	-55.693	-30.478	39.543	1.00	54.09
16207	C	PHE	C	508	-56.100	-30.855	43.280	1.00	53.25
16208	O	PHE	C	508	-54.935	-31.218	43.230	1.00	53.57

FIGURE 3 LF

A	B	C	D	E	F	G	H	I	J
16209	N	ASP	C	509	-57.094	-31.672	43.591	1.00	54.01
16210	CA	ASP	C	509	-56.864	-33.065	43.923	1.00	54.47
16211	CB	ASP	C	509	-57.562	-33.383	45.244	1.00	54.61
16212	CG	ASP	C	509	-57.124	-34.710	45.830	1.00	55.69
16213	OD1	ASP	C	509	-56.496	-35.515	45.096	1.00	55.73
16214	OD2	ASP	C	509	-57.358	-35.026	47.019	1.00	56.78
16215	C	ASP	C	509	-57.446	-33.946	42.834	1.00	54.50
16216	O	ASP	C	509	-58.631	-34.255	42.870	1.00	54.41
16217	N	LYS	C	510	-56.633	-34.377	41.878	1.00	54.71
16218	CA	LYS	C	510	-57.194	-35.163	40.787	1.00	55.19
16219	CB	LYS	C	510	-56.290	-35.182	39.550	1.00	55.52
16220	CG	LYS	C	510	-55.265	-36.277	39.491	1.00	57.13
16221	CD	LYS	C	510	-54.371	-36.077	38.265	1.00	59.98
16222	CE	LYS	C	510	-53.381	-37.232	38.092	1.00	61.73
16223	NZ	LYS	C	510	-52.692	-37.631	39.371	1.00	62.38
16224	C	LYS	C	510	-57.660	-36.551	41.217	1.00	55.14
16225	O	LYS	C	510	-58.029	-37.382	40.385	1.00	55.40
16226	N	SER	C	511	-57.662	-36.790	42.524	1.00	54.73
16227	CA	SER	C	511	-58.232	-38.018	43.054	1.00	54.59
16228	CB	SER	C	511	-57.539	-38.443	44.358	1.00	54.85
16229	OG	SER	C	511	-57.882	-37.597	45.448	1.00	54.26
16230	C	SER	C	511	-59.714	-37.768	43.299	1.00	54.35
16231	O	SER	C	511	-60.493	-38.700	43.493	1.00	55.12
16232	N	LYS	C	512	-60.101	-36.499	43.258	1.00	53.65
16233	CA	LYS	C	512	-61.468	-36.078	43.552	1.00	52.82
16234	CB	LYS	C	512	-61.403	-34.763	44.331	1.00	53.04
16235	CG	LYS	C	512	-62.099	-34.771	45.667	1.00	54.26
16236	CD	LYS	C	512	-62.383	-33.345	46.125	1.00	56.92
16237	CE	LYS	C	512	-63.344	-32.629	45.158	1.00	56.98
16238	NZ	LYS	C	512	-63.916	-31.389	45.767	1.00	57.79
16239	C	LYS	C	512	-62.325	-35.882	42.290	1.00	51.91
16240	O	LYS	C	512	-61.808	-35.821	41.177	1.00	51.79
16241	N	LYS	C	513	-63.640	-35.797	42.457	1.00	50.85
16242	CA	LYS	C	513	-64.516	-35.506	41.321	1.00	50.07
16243	CB	LYS	C	513	-65.636	-36.534	41.193	1.00	50.55
16244	CG	LYS	C	513	-65.517	-37.440	39.973	1.00	51.47
16245	CD	LYS	C	513	-64.311	-38.346	40.038	1.00	52.82
16246	CE	LYS	C	513	-64.352	-39.369	38.912	1.00	55.30
16247	NZ	LYS	C	513	-63.323	-40.430	39.099	1.00	56.62
16248	C	LYS	C	513	-65.106	-34.104	41.440	1.00	49.11
16249	O	LYS	C	513	-65.999	-33.861	42.265	1.00	48.91
16250	N	TYR	C	514	-64.592	-33.190	40.616	1.00	47.40
16251	CA	TYR	C	514	-65.022	-31.796	40.625	1.00	45.99
16252	CB	TYR	C	514	-63.823	-30.876	40.349	1.00	46.37
16253	CG	TYR	C	514	-62.751	-30.847	41.425	1.00	46.45
16254	CD1	TYR	C	514	-62.653	-29.772	42.299	1.00	45.90
16255	CE1	TYR	C	514	-61.682	-29.725	43.274	1.00	45.89
16256	CZ	TYR	C	514	-60.775	-30.760	43.391	1.00	46.54
16257	OH	TYR	C	514	-59.813	-30.702	44.370	1.00	46.03
16258	CE2	TYR	C	514	-60.833	-31.837	42.527	1.00	46.37
16259	CD2	TYR	C	514	-61.821	-31.876	41.545	1.00	46.34

FIGURE 3 LG

A	B	C	D	E	F	G	H	I	J
16260	C	TYR	C	514	-66.110	-31.490	39.586	1.00	44.66
16261	O	TYR	C	514	-66.156	-32.084	38.506	1.00	44.11
16262	N	PRO	C	515	-66.994	-30.558	39.924	1.00	43.58
16263	CA	PRO	C	515	-67.989	-30.075	38.966	1.00	42.42
16264	CB	PRO	C	515	-68.864	-29.137	39.796	1.00	42.57
16265	CG	PRO	C	515	-68.510	-29.388	41.201	1.00	43.62
16266	CD	PRO	C	515	-67.116	-29.917	41.242	1.00	43.47
16267	C	PRO	C	515	-67.227	-29.269	37.926	1.00	41.29
16268	O	PRO	C	515	-66.223	-28.628	38.255	1.00	41.28
16269	N	LEU	C	516	-67.688	-29.305	36.690	1.00	39.64
16270	CA	LEU	C	516	-66.989	-28.641	35.611	1.00	38.46
16271	CB	LEU	C	516	-66.460	-29.692	34.635	1.00	38.67
16272	CG	LEU	C	516	-65.667	-29.255	33.401	1.00	38.05
16273	CD1	LEU	C	516	-64.209	-29.124	33.739	1.00	36.52
16274	CD2	LEU	C	516	-65.827	-30.283	32.308	1.00	37.46
16275	C	LEU	C	516	-67.940	-27.682	34.889	1.00	37.84
16276	O	LEU	C	516	-69.102	-28.014	34.635	1.00	37.36
16277	N	LEU	C	517	-67.443	-26.486	34.593	1.00	36.52
16278	CA	LEU	C	517	-68.210	-25.490	33.877	1.00	35.89
16279	CB	LEU	C	517	-68.404	-24.238	34.727	1.00	35.94
16280	CG	LEU	C	517	-68.978	-23.022	34.005	1.00	35.16
16281	CD1	LEU	C	517	-68.996	-21.860	34.950	1.00	33.43
16282	CD2	LEU	C	517	-70.380	-23.317	33.475	1.00	34.88
16283	C	LEU	C	517	-67.465	-25.156	32.608	1.00	35.87
16284	O	LEU	C	517	-66.327	-24.682	32.647	1.00	35.50
16285	N	LEU	C	518	-68.106	-25.432	31.481	1.00	35.95
16286	CA	LEU	C	518	-67.500	-25.207	30.188	1.00	36.30
16287	CB	LEU	C	518	-68.041	-26.207	29.181	1.00	36.73
16288	CG	LEU	C	518	-67.282	-26.325	27.869	1.00	37.04
16289	CD1	LEU	C	518	-65.811	-26.590	28.134	1.00	35.63
16290	CD2	LEU	C	518	-67.905	-27.421	27.014	1.00	37.45
16291	C	LEU	C	518	-67.791	-23.787	29.735	1.00	36.65
16292	O	LEU	C	518	-68.924	-23.447	29.387	1.00	36.65
16293	N	ASP	C	519	-66.749	-22.967	29.771	1.00	36.55
16294	CA	ASP	C	519	-66.805	-21.572	29.402	1.00	36.82
16295	CB	ASP	C	519	-65.752	-20.816	30.212	1.00	36.79
16296	CG	ASP	C	519	-65.709	-19.360	29.894	1.00	38.12
16297	OD1	ASP	C	519	-65.070	-18.613	30.668	1.00	39.34
16298	OD2	ASP	C	519	-66.275	-18.868	28.887	1.00	40.62
16299	C	ASP	C	519	-66.522	-21.496	27.917	1.00	36.75
16300	O	ASP	C	519	-65.403	-21.757	27.486	1.00	37.25
16301	N	VAL	C	520	-67.529	-21.141	27.125	1.00	36.58
16302	CA	VAL	C	520	-67.366	-21.164	25.677	1.00	36.22
16303	CB	VAL	C	520	-68.311	-22.213	25.027	1.00	36.82
16304	CG1	VAL	C	520	-69.765	-21.780	25.170	1.00	36.54
16305	CG2	VAL	C	520	-67.986	-22.386	23.548	1.00	35.85
16306	C	VAL	C	520	-67.613	-19.853	24.926	1.00	35.93
16307	O	VAL	C	520	-68.394	-19.002	25.342	1.00	35.87
16308	N	TYR	C	521	-66.905	-19.711	23.816	1.00	35.45
16309	CA	TYR	C	521	-67.209	-18.693	22.839	1.00	35.17
16310	CB	TYR	C	521	-66.073	-17.707	22.647	1.00	35.08

FIGURE 3 LH

A	B	C	D	E	F	G	H	I	J
16311	CG	TYR	C	521	-66.482	-16.546	21.785	1.00	36.28
16312	CD1	TYR	C	521	-65.839	-16.284	20.581	1.00	37.58
16313	CE1	TYR	C	521	-66.213	-15.203	19.789	1.00	37.96
16314	CZ	TYR	C	521	-67.242	-14.385	20.193	1.00	37.65
16315	OH	TYR	C	521	-67.625	-13.317	19.397	1.00	39.32
16316	CE2	TYR	C	521	-67.900	-14.631	21.385	1.00	36.97
16317	CD2	TYR	C	521	-67.524	-15.709	22.168	1.00	36.92
16318	C	TYR	C	521	-67.416	-19.499	21.576	1.00	34.87
16319	O	TYR	C	521	-68.549	-19.667	21.123	1.00	34.35
16320	N	ALA	C	522	-66.302	-20.002	21.035	1.00	34.36
16321	CA	ALA	C	522	-66.267	-20.860	19.849	1.00	34.66
16322	CB	ALA	C	522	-67.105	-22.122	20.053	1.00	34.03
16323	C	ALA	C	522	-66.639	-20.174	18.538	1.00	35.15
16324	O	ALA	C	522	-67.042	-20.828	17.590	1.00	35.80
16325	N	GLY	C	523	-66.513	-18.863	18.476	1.00	35.90
16326	CA	GLY	C	523	-66.770	-18.161	17.237	1.00	37.37
16327	C	GLY	C	523	-65.615	-18.337	16.264	1.00	38.19
16328	O	GLY	C	523	-64.519	-18.759	16.643	1.00	38.72
16329	N	PRO	C	524	-65.854	-18.030	14.999	1.00	38.51
16330	CA	PRO	C	524	-64.820	-18.193	13.978	1.00	38.34
16331	CB	PRO	C	524	-65.494	-17.648	12.718	1.00	38.73
16332	CG	PRO	C	524	-66.940	-17.914	12.957	1.00	37.95
16333	CD	PRO	C	524	-67.132	-17.573	14.425	1.00	38.47
16334	C	PRO	C	524	-63.549	-17.440	14.314	1.00	38.47
16335	O	PRO	C	524	-63.571	-16.247	14.616	1.00	37.52
16336	N	CYS	C	525	-62.436	-18.171	14.255	1.00	38.84
16337	CA	CYS	C	525	-61.123	-17.626	14.562	1.00	38.88
16338	CB	CYS	C	525	-60.759	-16.485	13.612	1.00	38.85
16339	SG	CYS	C	525	-59.060	-15.880	13.830	1.00	40.62
16340	C	CYS	C	525	-61.048	-17.158	16.004	1.00	38.44
16341	O	CYS	C	525	-60.417	-16.146	16.313	1.00	38.85
16342	N	SER	C	526	-61.704	-17.884	16.895	1.00	38.38
16343	CA	SER	C	526	-61.654	-17.526	18.311	1.00	38.62
16344	CB	SER	C	526	-62.996	-17.809	18.994	1.00	38.49
16345	OG	SER	C	526	-63.435	-19.140	18.774	1.00	37.11
16346	C	SER	C	526	-60.542	-18.264	19.058	1.00	39.03
16347	O	SER	C	526	-60.001	-19.258	18.584	1.00	39.34
16348	N	GLN	C	527	-60.196	-17.755	20.230	1.00	39.54
16349	CA	GLN	C	527	-59.257	-18.434	21.100	1.00	39.53
16350	CB	GLN	C	527	-57.821	-17.977	20.862	1.00	39.36
16351	CG	GLN	C	527	-56.804	-18.894	21.539	1.00	38.55
16352	CD	GLN	C	527	-55.382	-18.582	21.129	1.00	36.93
16353	OE1	GLN	C	527	-54.818	-17.568	21.549	1.00	36.25
16354	NE2	GLN	C	527	-54.802	-19.443	20.301	1.00	35.31
16355	C	GLN	C	527	-59.632	-18.203	22.547	1.00	40.01
16356	O	GLN	C	527	-59.517	-17.087	23.057	1.00	39.96
16357	N	LYS	C	528	-60.052	-19.279	23.202	1.00	40.79
16358	CA	LYS	C	528	-60.438	-19.258	24.607	1.00	41.63
16359	CB	LYS	C	528	-61.821	-19.893	24.777	1.00	41.25
16360	CG	LYS	C	528	-62.964	-19.061	24.242	1.00	42.03
16361	CD	LYS	C	528	-62.998	-17.679	24.871	1.00	41.88

FIGURE 3 LI

A	B	C	D	E	F	G	H	I	J
16362	CE	LYS	C	528	-63.410	-17.733	26.334	1.00	43.10
16363	NZ	LYS	C	528	-64.595	-18.591	26.552	1.00	43.01
16364	C	LYS	C	528	-59.435	-20.019	25.490	1.00	42.21
16365	O	LYS	C	528	-59.585	-20.041	26.707	1.00	42.08
16366	N	ALA	C	529	-58.452	-20.679	24.878	1.00	43.14
16367	CA	ALA	C	529	-57.400	-21.380	25.637	1.00	44.01
16368	CB	ALA	C	529	-57.263	-22.810	25.193	1.00	43.72
16369	C	ALA	C	529	-56.101	-20.621	25.426	1.00	44.60
16370	O	ALA	C	529	-55.393	-20.825	24.434	1.00	44.85
16371	N	ASP	C	530	-55.813	-19.742	26.381	1.00	45.15
16372	CA	ASP	C	530	-54.731	-18.776	26.297	1.00	45.16
16373	CB	ASP	C	530	-55.279	-17.374	26.611	1.00	45.38
16374	CG	ASP	C	530	-56.191	-16.835	25.547	1.00	47.53
16375	OD1	ASP	C	530	-56.389	-17.511	24.514	1.00	51.33
16376	OD2	ASP	C	530	-56.760	-15.725	25.653	1.00	49.13
16377	C	ASP	C	530	-53.650	-18.996	27.336	1.00	44.93
16378	O	ASP	C	530	-53.765	-19.821	28.244	1.00	44.54
16379	N	THR	C	531	-52.623	-18.171	27.211	1.00	44.51
16380	CA	THR	C	531	-51.547	-18.105	28.162	1.00	44.63
16381	CB	THR	C	531	-50.218	-17.958	27.403	1.00	44.73
16382	OG1	THR	C	531	-49.571	-19.236	27.328	1.00	44.91
16383	CG2	THR	C	531	-49.257	-17.124	28.184	1.00	44.96
16384	C	THR	C	531	-51.813	-16.877	29.014	1.00	44.29
16385	O	THR	C	531	-51.008	-16.521	29.875	1.00	44.87
16386	N	VAL	C	532	-52.951	-16.227	28.775	1.00	43.80
16387	CA	VAL	C	532	-53.306	-15.010	29.511	1.00	43.27
16388	CB	VAL	C	532	-54.450	-14.236	28.829	1.00	43.34
16389	CG1	VAL	C	532	-54.672	-12.897	29.531	1.00	42.91
16390	CG2	VAL	C	532	-54.165	-14.035	27.338	1.00	43.20
16391	C	VAL	C	532	-53.732	-15.267	30.955	1.00	42.83
16392	O	VAL	C	532	-54.409	-16.261	31.248	1.00	42.85
16393	N	PHE	C	533	-53.329	-14.361	31.843	1.00	41.98
16394	CA	PHE	C	533	-53.702	-14.411	33.249	1.00	41.36
16395	CB	PHE	C	533	-52.565	-13.918	34.138	1.00	41.44
16396	CG	PHE	C	533	-52.964	-13.784	35.574	1.00	41.43
16397	CD1	PHE	C	533	-52.925	-14.879	36.418	1.00	41.07
16398	CE1	PHE	C	533	-53.322	-14.766	37.732	1.00	40.00
16399	CZ	PHE	C	533	-53.775	-13.549	38.210	1.00	39.72
16400	CE2	PHE	C	533	-53.838	-12.457	37.372	1.00	38.97
16401	CD2	PHE	C	533	-53.437	-12.576	36.067	1.00	40.26
16402	C	PHE	C	533	-54.924	-13.537	33.524	1.00	41.00
16403	O	PHE	C	533	-54.880	-12.332	33.323	1.00	40.50
16404	N	ARG	C	534	-55.993	-14.128	34.049	1.00	40.90
16405	CA	ARG	C	534	-57.228	-13.371	34.249	1.00	40.66
16406	CB	ARG	C	534	-58.307	-13.855	33.279	1.00	40.29
16407	CG	ARG	C	534	-57.986	-13.583	31.820	1.00	40.64
16408	CD	ARG	C	534	-58.970	-14.213	30.847	1.00	41.30
16409	NE	ARG	C	534	-58.329	-14.682	29.619	1.00	41.87
16410	CZ	ARG	C	534	-58.104	-13.910	28.572	1.00	42.89
16411	NH1	ARG	C	534	-58.468	-12.627	28.616	1.00	46.10
16412	NH2	ARG	C	534	-57.520	-14.401	27.485	1.00	39.05

FIGURE 3 LJ

A	B	C	D	E	F	G	H	I	J
16413	C	ARG	C	534	-57.777	-13.400	35.655	1.00	40.25
16414	O	ARG	C	534	-57.635	-14.379	36.373	1.00	41.51
16415	N	LEU	C	535	-58.399	-12.302	36.043	1.00	39.84
16416	CA	LEU	C	535	-59.089	-12.207	37.319	1.00	39.11
16417	CB	LEU	C	535	-58.534	-11.054	38.151	1.00	39.17
16418	CG	LEU	C	535	-57.104	-11.299	38.668	1.00	39.51
16419	CD1	LEU	C	535	-56.585	-10.129	39.483	1.00	39.68
16420	CD2	LEU	C	535	-57.045	-12.577	39.505	1.00	38.92
16421	C	LEU	C	535	-60.559	-11.998	36.957	1.00	38.90
16422	O	LEU	C	535	-61.010	-10.871	36.702	1.00	38.84
16423	N	ASN	C	536	-61.301	-13.099	36.897	1.00	37.75
16424	CA	ASN	C	536	-62.671	-13.028	36.438	1.00	36.92
16425	CB	ASN	C	536	-62.702	-13.400	34.975	1.00	36.91
16426	CG	ASN	C	536	-62.185	-14.767	34.752	1.00	36.93
16427	OD1	ASN	C	536	-61.905	-15.481	35.716	1.00	35.89
16428	ND2	ASN	C	536	-62.046	-15.161	33.490	1.00	37.09
16429	C	ASN	C	536	-63.616	-13.931	37.234	1.00	35.92
16430	O	ASN	C	536	-63.264	-14.411	38.309	1.00	36.04
16431	N	TRP	C	537	-64.812	-14.147	36.697	1.00	34.35
16432	CA	TRP	C	537	-65.828	-14.943	37.363	1.00	33.16
16433	CB	TRP	C	537	-67.137	-14.928	36.556	1.00	32.12
16434	CG	TRP	C	537	-68.354	-15.634	37.166	1.00	27.97
16435	CD1	TRP	C	537	-68.867	-15.481	38.426	1.00	25.01
16436	NE1	TRP	C	537	-69.975	-16.286	38.592	1.00	23.18
16437	CE2	TRP	C	537	-70.212	-16.965	37.427	1.00	24.61
16438	CD2	TRP	C	537	-69.212	-16.582	36.507	1.00	25.62
16439	CE3	TRP	C	537	-69.241	-17.136	35.221	1.00	25.93
16440	CZ3	TRP	C	537	-70.241	-18.058	34.901	1.00	27.22
16441	CH2	TRP	C	537	-71.227	-18.408	35.838	1.00	28.01
16442	CZ2	TRP	C	537	-71.231	-17.871	37.101	1.00	26.78
16443	C	TRP	C	537	-65.290	-16.348	37.581	1.00	33.67
16444	O	TRP	C	537	-65.401	-16.888	38.672	1.00	34.23
16445	N	ALA	C	538	-64.684	-16.913	36.549	1.00	33.80
16446	CA	ALA	C	538	-64.071	-18.229	36.633	1.00	34.55
16447	CB	ALA	C	538	-63.438	-18.591	35.314	1.00	34.48
16448	C	ALA	C	538	-63.043	-18.346	37.768	1.00	34.94
16449	O	ALA	C	538	-62.919	-19.403	38.384	1.00	35.21
16450	N	THR	C	539	-62.320	-17.266	38.045	1.00	35.22
16451	CA	THR	C	539	-61.351	-17.253	39.135	1.00	35.66
16452	CB	THR	C	539	-60.624	-15.886	39.212	1.00	35.58
16453	OG1	THR	C	539	-60.016	-15.575	37.951	1.00	35.55
16454	CG2	THR	C	539	-59.446	-15.946	40.150	1.00	35.53
16455	C	THR	C	539	-62.098	-17.496	40.434	1.00	36.37
16456	O	THR	C	539	-61.663	-18.275	41.287	1.00	36.93
16457	N	TYR	C	540	-63.236	-16.823	40.582	1.00	36.55
16458	CA	TYR	C	540	-64.051	-16.956	41.780	1.00	36.24
16459	CB	TYR	C	540	-65.113	-15.866	41.820	1.00	35.97
16460	CG	TYR	C	540	-66.446	-16.363	42.341	1.00	35.62
16461	CD1	TYR	C	540	-67.475	-16.697	41.470	1.00	34.83
16462	CE1	TYR	C	540	-68.690	-17.151	41.949	1.00	34.16
16463	CZ	TYR	C	540	-68.878	-17.277	43.314	1.00	34.62

FIGURE 3 LK

A	B	C	D	E	F	G	H	I	J
16464	OH	TYR	C	540	-70.076	-17.736	43.812	1.00	34.31
16465	CE2	TYR	C	540	-67.867	-16.960	44.194	1.00	33.49
16466	CD2	TYR	C	540	-66.666	-16.515	43.708	1.00	34.96
16467	C	TYR	C	540	-64.736	-18.313	41.848	1.00	36.61
16468	O	TYR	C	540	-64.882	-18.898	42.916	1.00	36.80
16469	N	LEU	C	541	-65.183	-18.809	40.709	1.00	36.87
16470	CA	LEU	C	541	-65.856	-20.092	40.700	1.00	37.25
16471	CB	LEU	C	541	-66.355	-20.415	39.291	1.00	36.93
16472	CG	LEU	C	541	-67.566	-19.587	38.829	1.00	38.22
16473	CD1	LEU	C	541	-67.862	-19.803	37.343	1.00	39.05
16474	CD2	LEU	C	541	-68.801	-19.873	39.668	1.00	36.20
16475	C	LEU	C	541	-64.930	-21.203	41.203	1.00	37.67
16476	O	LEU	C	541	-65.363	-22.101	41.915	1.00	37.33
16477	N	ALA	C	542	-63.657	-21.142	40.821	1.00	38.09
16478	CA	ALA	C	542	-62.717	-22.187	41.203	1.00	39.00
16479	CB	ALA	C	542	-61.599	-22.347	40.155	1.00	39.20
16480	C	ALA	C	542	-62.143	-21.960	42.595	1.00	39.15
16481	O	ALA	C	542	-62.083	-22.888	43.389	1.00	40.14
16482	N	SER	C	543	-61.747	-20.731	42.901	1.00	39.21
16483	CA	SER	C	543	-61.203	-20.426	44.217	1.00	39.14
16484	CB	SER	C	543	-60.750	-18.971	44.292	1.00	39.34
16485	OG	SER	C	543	-60.583	-18.543	45.636	1.00	39.58
16486	C	SER	C	543	-62.203	-20.699	45.328	1.00	39.36
16487	O	SER	C	543	-61.878	-21.352	46.316	1.00	39.08
16488	N	THR	C	544	-63.426	-20.206	45.157	1.00	39.58
16489	CA	THR	C	544	-64.447	-20.320	46.187	1.00	39.54
16490	CB	THR	C	544	-65.295	-19.044	46.203	1.00	39.71
16491	OG1	THR	C	544	-64.494	-17.943	46.641	1.00	40.26
16492	CG2	THR	C	544	-66.392	-19.126	47.256	1.00	39.12
16493	C	THR	C	544	-65.378	-21.526	46.089	1.00	39.77
16494	O	THR	C	544	-65.692	-22.152	47.097	1.00	40.00
16495	N	GLU	C	545	-65.842	-21.860	44.892	1.00	39.52
16496	CA	GLU	C	545	-66.839	-22.916	44.797	1.00	39.27
16497	CB	GLU	C	545	-67.973	-22.502	43.856	1.00	39.57
16498	CG	GLU	C	545	-68.526	-21.111	44.110	1.00	40.23
16499	CD	GLU	C	545	-69.258	-21.007	45.431	1.00	42.68
16500	OE1	GLU	C	545	-69.710	-19.890	45.776	1.00	42.51
16501	OE2	GLU	C	545	-69.390	-22.047	46.119	1.00	44.25
16502	C	GLU	C	545	-66.252	-24.254	44.381	1.00	38.97
16503	O	GLU	C	545	-66.964	-25.242	44.272	1.00	38.95
16504	N	ASN	C	546	-64.946	-24.273	44.153	1.00	38.74
16505	CA	ASN	C	546	-64.246	-25.494	43.770	1.00	38.27
16506	CB	ASN	C	546	-64.178	-26.487	44.943	1.00	37.92
16507	CG	ASN	C	546	-63.585	-25.855	46.201	1.00	38.77
16508	OD1	ASN	C	546	-64.262	-25.721	47.206	1.00	41.06
16509	ND2	ASN	C	546	-62.329	-25.421	46.126	1.00	39.38
16510	C	ASN	C	546	-64.809	-26.113	42.500	1.00	37.64
16511	O	ASN	C	546	-64.896	-27.337	42.356	1.00	37.60
16512	N	ILE	C	547	-65.180	-25.245	41.572	1.00	36.89
16513	CA	ILE	C	547	-65.659	-25.683	40.281	1.00	36.08
16514	CB	ILE	C	547	-66.820	-24.790	39.801	1.00	36.37



FIGURE 3 LL

A	B	C	D	E	F	G	H	I	J
16515	CG1	ILE	C	547	-68.037	-24.967	40.700	1.00	36.20
16516	CD1	ILE	C	547	-69.000	-23.815	40.631	1.00	36.43
16517	CG2	ILE	C	547	-67.170	-25.094	38.334	1.00	34.81
16518	C	ILE	C	547	-64.528	-25.580	39.288	1.00	35.90
16519	O	ILE	C	547	-63.727	-24.658	39.336	1.00	35.90
16520	N	ILE	C	548	-64.448	-26.542	38.385	1.00	35.87
16521	CA	ILE	C	548	-63.467	-26.450	37.333	1.00	35.53
16522	CB	ILE	C	548	-63.015	-27.852	36.888	1.00	35.11
16523	CG1	ILE	C	548	-62.111	-28.490	37.955	1.00	35.15
16524	CD1	ILE	C	548	-61.816	-29.953	37.701	1.00	33.64
16525	CG2	ILE	C	548	-62.263	-27.773	35.562	1.00	34.96
16526	C	ILE	C	548	-64.132	-25.716	36.178	1.00	36.13
16527	O	ILE	C	548	-65.292	-25.979	35.849	1.00	35.24
16528	N	VAL	C	549	-63.421	-24.769	35.576	1.00	36.68
16529	CA	VAL	C	549	-63.981	-24.120	34.404	1.00	37.61
16530	CB	VAL	C	549	-64.516	-22.681	34.676	1.00	38.02
16531	CG1	VAL	C	549	-63.886	-22.104	35.895	1.00	37.21
16532	CG2	VAL	C	549	-64.381	-21.778	33.434	1.00	37.91
16533	C	VAL	C	549	-63.011	-24.249	33.263	1.00	37.87
16534	O	VAL	C	549	-61.891	-23.741	33.298	1.00	38.40
16535	N	ALA	C	550	-63.452	-24.988	32.260	1.00	38.59
16536	CA	ALA	C	550	-62.616	-25.330	31.136	1.00	39.07
16537	CB	ALA	C	550	-62.653	-26.838	30.910	1.00	38.57
16538	C	ALA	C	550	-63.101	-24.605	29.903	1.00	39.64
16539	O	ALA	C	550	-64.266	-24.236	29.816	1.00	39.78
16540	N	SER	C	551	-62.186	-24.401	28.962	1.00	40.23
16541	CA	SER	C	551	-62.492	-23.794	27.675	1.00	40.47
16542	CB	SER	C	551	-61.945	-22.376	27.608	1.00	40.26
16543	OG	SER	C	551	-62.591	-21.553	28.569	1.00	40.15
16544	C	SER	C	551	-61.858	-24.676	26.613	1.00	40.84
16545	O	SER	C	551	-60.957	-25.464	26.913	1.00	40.72
16546	N	PHE	C	552	-62.317	-24.555	25.374	1.00	41.26
16547	CA	PHE	C	552	-61.836	-25.446	24.336	1.00	41.74
16548	CB	PHE	C	552	-62.672	-26.712	24.352	1.00	41.97
16549	CG	PHE	C	552	-62.180	-27.772	23.431	1.00	43.86
16550	CD1	PHE	C	552	-60.964	-28.398	23.664	1.00	45.27
16551	CE1	PHE	C	552	-60.510	-29.397	22.814	1.00	46.32
16552	CZ	PHE	C	552	-61.275	-29.781	21.722	1.00	45.55
16553	CE2	PHE	C	552	-62.485	-29.161	21.482	1.00	45.75
16554	CD2	PHE	C	552	-62.935	-28.162	22.337	1.00	44.84
16555	C	PHE	C	552	-61.884	-24.836	22.951	1.00	41.94
16556	O	PHE	C	552	-62.936	-24.373	22.496	1.00	41.67
16557	N	ASP	C	553	-60.732	-24.844	22.283	1.00	42.13
16558	CA	ASP	C	553	-60.617	-24.339	20.924	1.00	41.89
16559	CB	ASP	C	553	-59.281	-23.658	20.737	1.00	42.09
16560	CG	ASP	C	553	-59.159	-22.394	21.538	1.00	43.48
16561	OD1	ASP	C	553	-60.196	-21.795	21.894	1.00	45.76
16562	OD2	ASP	C	553	-58.058	-21.906	21.845	1.00	45.69
16563	C	ASP	C	553	-60.743	-25.500	19.951	1.00	41.77
16564	O	ASP	C	553	-59.754	-26.158	19.594	1.00	41.88
16565	N	GLY	C	554	-61.969	-25.773	19.542	1.00	41.29

FIGURE 3 LM

A	B	C	D	E	F	G	H	I	J
16566	CA	GLY	C	554	-62.220	-26.845	18.609	1.00	40.93
16567	C	GLY	C	554	-62.193	-26.316	17.197	1.00	40.83
16568	O	GLY	C	554	-61.634	-25.250	16.917	1.00	40.52
16569	N	ARG	C	555	-62.808	-27.069	16.301	1.00	40.99
16570	CA	ARG	C	555	-62.866	-26.677	14.908	1.00	41.49
16571	CB	ARG	C	555	-63.601	-27.740	14.102	1.00	41.66
16572	CG	ARG	C	555	-62.760	-28.989	13.875	1.00	41.22
16573	CD	ARG	C	555	-63.476	-30.097	13.156	1.00	40.78
16574	NE	ARG	C	555	-64.442	-30.770	14.014	1.00	41.22
16575	CZ	ARG	C	555	-65.264	-31.714	13.583	1.00	41.18
16576	NH1	ARG	C	555	-65.220	-32.087	12.309	1.00	41.17
16577	NH2	ARG	C	555	-66.122	-32.291	14.416	1.00	40.16
16578	C	ARG	C	555	-63.521	-25.311	14.728	1.00	41.79
16579	O	ARG	C	555	-64.683	-25.107	15.074	1.00	41.79
16580	N	GLY	C	556	-62.760	-24.380	14.177	1.00	41.99
16581	CA	GLY	C	556	-63.256	-23.047	13.921	1.00	41.94
16582	C	GLY	C	556	-62.359	-22.071	14.646	1.00	42.39
16583	O	GLY	C	556	-62.303	-20.893	14.290	1.00	42.40
16584	N	SER	C	557	-61.647	-22.557	15.663	1.00	42.64
16585	CA	SER	C	557	-60.792	-21.667	16.441	1.00	43.31
16586	CB	SER	C	557	-60.216	-22.349	17.693	1.00	43.59
16587	OG	SER	C	557	-59.333	-23.428	17.384	1.00	45.63
16588	C	SER	C	557	-59.719	-21.121	15.527	1.00	43.00
16589	O	SER	C	557	-59.514	-21.630	14.435	1.00	43.42
16590	N	GLY	C	558	-59.065	-20.054	15.945	1.00	43.19
16591	CA	GLY	C	558	-58.071	-19.441	15.102	1.00	43.61
16592	C	GLY	C	558	-56.649	-19.654	15.571	1.00	44.19
16593	O	GLY	C	558	-56.392	-20.332	16.583	1.00	43.85
16594	N	TYR	C	559	-55.730	-19.073	14.808	1.00	44.51
16595	CA	TYR	C	559	-54.319	-19.058	15.148	1.00	45.17
16596	CB	TYR	C	559	-54.153	-18.507	16.562	1.00	44.88
16597	CG	TYR	C	559	-54.891	-17.195	16.723	1.00	45.50
16598	CD1	TYR	C	559	-56.035	-17.095	17.522	1.00	46.07
16599	CE1	TYR	C	559	-56.723	-15.890	17.650	1.00	44.38
16600	CZ	TYR	C	559	-56.268	-14.775	16.969	1.00	45.26
16601	OH	TYR	C	559	-56.927	-13.574	17.077	1.00	46.25
16602	CE2	TYR	C	559	-55.149	-14.853	16.167	1.00	45.07
16603	CD2	TYR	C	559	-54.474	-16.060	16.040	1.00	45.53
16604	C	TYR	C	559	-53.640	-20.408	14.959	1.00	45.74
16605	O	TYR	C	559	-52.617	-20.695	15.583	1.00	45.64
16606	N	GLN	C	560	-54.200	-21.214	14.064	1.00	46.65
16607	CA	GLN	C	560	-53.680	-22.550	13.796	1.00	47.75
16608	CB	GLN	C	560	-54.429	-23.579	14.648	1.00	47.67
16609	CG	GLN	C	560	-54.543	-23.198	16.114	1.00	47.93
16610	CD	GLN	C	560	-55.769	-23.791	16.774	1.00	48.39
16611	OE1	GLN	C	560	-55.814	-24.992	17.049	1.00	48.11
16612	NE2	GLN	C	560	-56.772	-22.950	17.029	1.00	48.26
16613	C	GLN	C	560	-53.809	-22.932	12.324	1.00	48.53
16614	O	GLN	C	560	-53.763	-24.118	11.981	1.00	48.91
16615	N	GLY	C	561	-53.990	-21.940	11.458	1.00	49.30
16616	CA	GLY	C	561	-54.115	-22.201	10.033	1.00	50.32

FIGURE 3 LN

A	B	C	D	E	F	G	H	I	J
16617	C	GLY	C	561	-55.525	-22.504	9.566	1.00	50.96
16618	O	GLY	C	561	-56.317	-23.069	10.318	1.00	51.27
16619	N	ASP	C	562	-55.818	-22.155	8.310	1.00	51.66
16620	CA	ASP	C	562	-57.157	-22.286	7.713	1.00	52.41
16621	CB	ASP	C	562	-57.138	-21.884	6.238	1.00	52.90
16622	CG	ASP	C	562	-56.800	-20.439	6.035	1.00	54.58
16623	OD1	ASP	C	562	-56.684	-19.702	7.044	1.00	57.97
16624	OD2	ASP	C	562	-56.622	-19.953	4.900	1.00	56.06
16625	C	ASP	C	562	-57.814	-23.650	7.778	1.00	52.25
16626	O	ASP	C	562	-59.020	-23.755	7.594	1.00	52.28
16627	N	LYS	C	563	-57.036	-24.696	7.996	1.00	52.37
16628	CA	LYS	C	563	-57.602	-26.041	7.977	1.00	52.51
16629	CB	LYS	C	563	-56.501	-27.099	8.107	1.00	52.84
16630	CG	LYS	C	563	-57.007	-28.505	8.419	1.00	53.34
16631	CD	LYS	C	563	-57.820	-29.095	7.274	1.00	55.29
16632	CE	LYS	C	563	-58.334	-30.493	7.624	1.00	56.52
16633	NZ	LYS	C	563	-57.237	-31.397	8.106	1.00	56.44
16634	C	LYS	C	563	-58.630	-26.212	9.081	1.00	52.27
16635	O	LYS	C	563	-59.670	-26.843	8.887	1.00	51.73
16636	N	ILE	C	564	-58.337	-25.639	10.241	1.00	51.93
16637	CA	ILE	C	564	-59.230	-25.784	11.373	1.00	52.01
16638	CB	ILE	C	564	-58.426	-26.018	12.652	1.00	52.00
16639	CG1	ILE	C	564	-59.364	-26.344	13.811	1.00	52.03
16640	CD1	ILE	C	564	-59.619	-25.180	14.719	1.00	52.08
16641	CG2	ILE	C	564	-57.582	-24.794	12.970	1.00	52.27
16642	C	ILE	C	564	-60.147	-24.577	11.528	1.00	51.91
16643	O	ILE	C	564	-61.282	-24.701	11.987	1.00	51.73
16644	N	MET	C	565	-59.657	-23.409	11.140	1.00	51.61
16645	CA	MET	C	565	-60.458	-22.212	11.282	1.00	51.47
16646	CB	MET	C	565	-59.615	-20.955	11.073	1.00	51.54
16647	CG	MET	C	565	-60.460	-19.705	10.934	1.00	51.13
16648	SD	MET	C	565	-59.551	-18.180	11.173	1.00	51.56
16649	CE	MET	C	565	-58.922	-17.890	9.531	1.00	50.91
16650	C	MET	C	565	-61.629	-22.224	10.310	1.00	51.27
16651	O	MET	C	565	-62.723	-21.778	10.647	1.00	51.17
16652	N	HIS	C	566	-61.395	-22.746	9.109	1.00	51.02
16653	CA	HIS	C	566	-62.420	-22.778	8.073	1.00	50.69
16654	CB	HIS	C	566	-61.799	-22.574	6.695	1.00	50.92
16655	CG	HIS	C	566	-61.310	-21.179	6.461	1.00	51.05
16656	ND1	HIS	C	566	-60.921	-20.724	5.221	1.00	51.62
16657	CE1	HIS	C	566	-60.554	-19.457	5.313	1.00	52.72
16658	NE2	HIS	C	566	-60.690	-19.074	6.571	1.00	52.74
16659	CD2	HIS	C	566	-61.160	-20.134	7.310	1.00	51.36
16660	C	HIS	C	566	-63.215	-24.058	8.111	1.00	50.68
16661	O	HIS	C	566	-64.132	-24.261	7.319	1.00	50.92
16662	N	ALA	C	567	-62.868	-24.930	9.042	1.00	50.62
16663	CA	ALA	C	567	-63.605	-26.161	9.197	1.00	50.77
16664	CB	ALA	C	567	-63.204	-26.855	10.475	1.00	50.79
16665	C	ALA	C	567	-65.101	-25.859	9.194	1.00	51.11
16666	O	ALA	C	567	-65.896	-26.641	8.655	1.00	51.22
16667	N	ILE	C	568	-65.482	-24.720	9.777	1.00	50.95

FIGURE 3 LO

A	B	C	D	E	F	G	H	I	J
16668	CA	ILE	C	568	-66.899	-24.356	9.856	1.00	51.05
16669	CB	ILE	C	568	-67.262	-23.718	11.226	1.00	50.91
16670	CG1	ILE	C	568	-66.195	-22.723	11.692	1.00	50.96
16671	CD1	ILE	C	568	-66.179	-21.411	10.952	1.00	51.13
16672	CG2	ILE	C	568	-67.441	-24.789	12.263	1.00	50.84
16673	C	ILE	C	568	-67.447	-23.488	8.734	1.00	51.22
16674	O	ILE	C	568	-68.620	-23.153	8.759	1.00	51.53
16675	N	ASN	C	569	-66.628	-23.117	7.757	1.00	51.43
16676	CA	ASN	C	569	-67.126	-22.276	6.669	1.00	51.48
16677	CB	ASN	C	569	-66.137	-22.263	5.501	1.00	51.32
16678	CG	ASN	C	569	-66.540	-21.291	4.406	1.00	51.63
16679	OD1	ASN	C	569	-67.048	-21.694	3.357	1.00	51.78
16680	ND2	ASN	C	569	-66.310	-20.005	4.640	1.00	51.32
16681	C	ASN	C	569	-68.516	-22.721	6.193	1.00	51.53
16682	O	ASN	C	569	-68.763	-23.907	6.002	1.00	51.32
16683	N	ARG	C	570	-69.429	-21.765	6.035	1.00	51.74
16684	CA	ARG	C	570	-70.792	-22.055	5.595	1.00	51.88
16685	CB	ARG	C	570	-70.791	-22.635	4.184	1.00	52.09
16686	CG	ARG	C	570	-70.401	-21.654	3.093	1.00	53.46
16687	CD	ARG	C	570	-70.372	-22.291	1.704	1.00	55.35
16688	NE	ARG	C	570	-71.603	-23.028	1.415	1.00	55.87
16689	CZ	ARG	C	570	-72.720	-22.465	0.958	1.00	56.49
16690	NH1	ARG	C	570	-73.787	-23.221	0.731	1.00	56.98
16691	NH2	ARG	C	570	-72.775	-21.153	0.725	1.00	54.90
16692	C	ARG	C	570	-71.503	-23.032	6.513	1.00	51.76
16693	O	ARG	C	570	-72.614	-23.468	6.224	1.00	51.59
16694	N	ARG	C	571	-70.865	-23.372	7.623	1.00	51.82
16695	CA	ARG	C	571	-71.421	-24.371	8.519	1.00	51.99
16696	CB	ARG	C	571	-70.737	-25.716	8.274	1.00	52.37
16697	CG	ARG	C	571	-71.638	-26.790	7.659	1.00	54.66
16698	CD	ARG	C	571	-71.790	-26.743	6.144	1.00	57.11
16699	NE	ARG	C	571	-73.091	-26.227	5.721	1.00	59.49
16700	CZ	ARG	C	571	-73.691	-26.552	4.577	1.00	60.45
16701	NH1	ARG	C	571	-74.875	-26.034	4.274	1.00	60.04
16702	NH2	ARG	C	571	-73.113	-27.396	3.733	1.00	60.76
16703	C	ARG	C	571	-71.361	-24.016	10.004	1.00	51.39
16704	O	ARG	C	571	-70.995	-24.843	10.830	1.00	51.58
16705	N	LEU	C	572	-71.719	-22.785	10.337	1.00	50.60
16706	CA	LEU	C	572	-71.820	-22.375	11.733	1.00	49.53
16707	CB	LEU	C	572	-72.217	-20.899	11.815	1.00	49.15
16708	CG	LEU	C	572	-71.108	-19.868	12.017	1.00	49.38
16709	CD1	LEU	C	572	-71.494	-18.543	11.413	1.00	50.08
16710	CD2	LEU	C	572	-69.767	-20.325	11.479	1.00	48.95
16711	C	LEU	C	572	-72.871	-23.250	12.427	1.00	48.87
16712	O	LEU	C	572	-73.839	-23.669	11.800	1.00	48.51
16713	N	GLY	C	573	-72.673	-23.530	13.714	1.00	48.27
16714	CA	GLY	C	573	-73.602	-24.350	14.474	1.00	47.83
16715	C	GLY	C	573	-73.434	-25.842	14.258	1.00	47.81
16716	O	GLY	C	573	-74.372	-26.620	14.437	1.00	47.71
16717	N	THR	C	574	-72.234	-26.248	13.860	1.00	48.01
16718	CA	THR	C	574	-71.951	-27.657	13.630	1.00	48.12

FIGURE 3 LP

A	B	C	D	E	F	G	H	I	J
16719	CB	THR	C	574	-71.755	-27.943	12.125	1.00	48.42
16720	OG1	THR	C	574	-70.599	-27.240	11.643	1.00	48.49
16721	CG2	THR	C	574	-72.907	-27.360	11.312	1.00	48.11
16722	C	THR	C	574	-70.728	-28.126	14.410	1.00	48.05
16723	O	THR	C	574	-70.813	-28.392	15.614	1.00	47.93
16724	N	PHE	C	575	-69.596	-28.212	13.716	1.00	47.66
16725	CA	PHE	C	575	-68.352	-28.731	14.291	1.00	47.46
16726	CB	PHE	C	575	-67.211	-28.654	13.266	1.00	47.51
16727	CG	PHE	C	575	-67.502	-29.384	11.987	1.00	46.95
16728	CD1	PHE	C	575	-68.111	-30.628	12.012	1.00	46.47
16729	CE1	PHE	C	575	-68.391	-31.305	10.848	1.00	45.87
16730	CZ	PHE	C	575	-68.069	-30.742	9.628	1.00	47.21
16731	CE2	PHE	C	575	-67.463	-29.493	9.582	1.00	48.25
16732	CD2	PHE	C	575	-67.185	-28.821	10.763	1.00	47.21
16733	C	PHE	C	575	-67.943	-28.056	15.598	1.00	47.31
16734	O	PHE	C	575	-67.533	-28.728	16.545	1.00	47.09
16735	N	GLU	C	576	-68.043	-26.729	15.629	1.00	47.40
16736	CA	GLU	C	576	-67.730	-25.922	16.811	1.00	47.37
16737	CB	GLU	C	576	-68.087	-24.469	16.528	1.00	47.70
16738	CG	GLU	C	576	-69.396	-24.370	15.753	1.00	49.50
16739	CD	GLU	C	576	-69.845	-22.955	15.543	1.00	51.64
16740	OE1	GLU	C	576	-69.110	-22.041	15.962	1.00	55.10
16741	OE2	GLU	C	576	-70.926	-22.754	14.962	1.00	52.07
16742	C	GLU	C	576	-68.582	-26.392	17.972	1.00	46.69
16743	O	GLU	C	576	-68.115	-26.518	19.099	1.00	46.67
16744	N	VAL	C	577	-69.849	-26.637	17.679	1.00	46.14
16745	CA	VAL	C	577	-70.809	-27.068	18.681	1.00	45.80
16746	CB	VAL	C	577	-72.238	-26.956	18.142	1.00	45.30
16747	CG1	VAL	C	577	-72.543	-25.522	17.833	1.00	45.07
16748	CG2	VAL	C	577	-73.227	-27.513	19.128	1.00	45.15
16749	C	VAL	C	577	-70.525	-28.491	19.143	1.00	46.01
16750	O	VAL	C	577	-70.573	-28.778	20.342	1.00	45.34
16751	N	GLU	C	578	-70.234	-29.378	18.193	1.00	46.47
16752	CA	GLU	C	578	-69.909	-30.756	18.540	1.00	47.41
16753	CB	GLU	C	578	-69.719	-31.645	17.306	1.00	47.95
16754	CG	GLU	C	578	-69.566	-33.119	17.691	1.00	51.44
16755	CD	GLU	C	578	-68.335	-33.802	17.088	1.00	55.56
16756	OE1	GLU	C	578	-68.189	-33.801	15.833	1.00	56.75
16757	OE2	GLU	C	578	-67.517	-34.352	17.876	1.00	55.92
16758	C	GLU	C	578	-68.633	-30.821	19.356	1.00	46.76
16759	O	GLU	C	578	-68.595	-31.442	20.418	1.00	46.81
16760	N	ASP	C	579	-67.591	-30.176	18.844	1.00	46.10
16761	CA	ASP	C	579	-66.289	-30.233	19.472	1.00	45.83
16762	CB	ASP	C	579	-65.262	-29.446	18.657	1.00	45.86
16763	CG	ASP	C	579	-65.005	-30.070	17.284	1.00	46.12
16764	OD1	ASP	C	579	-65.534	-31.169	17.008	1.00	45.17
16765	OD2	ASP	C	579	-64.283	-29.535	16.416	1.00	47.24
16766	C	ASP	C	579	-66.323	-29.809	20.941	1.00	45.70
16767	O	ASP	C	579	-65.476	-30.234	21.736	1.00	45.44
16768	N	GLN	C	580	-67.313	-29.000	21.307	1.00	45.21
16769	CA	GLN	C	580	-67.453	-28.576	22.693	1.00	44.84

# FIGURE 3 LQ

A	B	C	D	E	F	G	H	I	J
16770	CB	GLN	C	580	-68.332	-27.324	22.808	1.00	44.58
16771	CG	GLN	C	580	-67.720	-26.056	22.257	1.00	43.48
16772	CD	GLN	C	580	-66.564	-25.539	23.095	1.00	43.32
16773	OE1	GLN	C	580	-66.543	-25.717	24.315	1.00	43.34
16774	NE2	GLN	C	580	-65.607	-24.888	22.448	1.00	41.53
16775	C	GLN	C	580	-68.058	-29.721	23.497	1.00	44.86
16776	O	GLN	C	580	-67.748	-29.910	24.678	1.00	45.10
16777	N	ILE	C	581	-68.924	-30.487	22.857	1.00	45.08
16778	CA	ILE	C	581	-69.565	-31.615	23.525	1.00	45.76
16779	CB	ILE	C	581	-70.768	-32.100	22.722	1.00	45.76
16780	CG1	ILE	C	581	-71.763	-30.949	22.540	1.00	45.11
16781	CD1	ILE	C	581	-72.866	-31.243	21.562	1.00	45.04
16782	CG2	ILE	C	581	-71.426	-33.284	23.420	1.00	45.93
16783	C	ILE	C	581	-68.577	-32.752	23.785	1.00	46.32
16784	O	ILE	C	581	-68.519	-33.288	24.891	1.00	46.68
16785	N	GLU	C	582	-67.793	-33.113	22.777	1.00	46.90
16786	CA	GLU	C	582	-66.762	-34.135	22.964	1.00	47.45
16787	CB	GLU	C	582	-66.044	-34.455	21.642	1.00	47.64
16788	CG	GLU	C	582	-66.515	-35.742	20.969	1.00	48.90
16789	CD	GLU	C	582	-65.940	-36.988	21.616	1.00	49.74
16790	OE1	GLU	C	582	-64.704	-37.109	21.679	1.00	51.84
16791	OE2	GLU	C	582	-66.718	-37.855	22.059	1.00	50.95
16792	C	GLU	C	582	-65.756	-33.663	23.998	1.00	47.32
16793	O	GLU	C	582	-65.335	-34.426	24.874	1.00	47.48
16794	N	ALA	C	583	-65.367	-32.400	23.891	1.00	47.24
16795	CA	ALA	C	583	-64.426	-31.830	24.835	1.00	47.16
16796	CB	ALA	C	583	-64.344	-30.327	24.660	1.00	47.11
16797	C	ALA	C	583	-64.897	-32.181	26.228	1.00	47.26
16798	O	ALA	C	583	-64.154	-32.744	27.020	1.00	47.22
16799	N	ALA	C	584	-66.155	-31.869	26.516	1.00	47.82
16800	CA	ALA	C	584	-66.711	-32.163	27.826	1.00	48.16
16801	CB	ALA	C	584	-68.161	-31.743	27.910	1.00	48.18
16802	C	ALA	C	584	-66.557	-33.639	28.128	1.00	48.51
16803	O	ALA	C	584	-66.142	-33.995	29.225	1.00	48.47
16804	N	ARG	C	585	-66.891	-34.491	27.160	1.00	49.12
16805	CA	ARG	C	585	-66.724	-35.929	27.336	1.00	50.18
16806	CB	ARG	C	585	-67.079	-36.700	26.063	1.00	50.00
16807	CG	ARG	C	585	-68.501	-36.548	25.532	1.00	50.05
16808	CD	ARG	C	585	-68.884	-37.673	24.566	1.00	50.16
16809	NE	ARG	C	585	-69.641	-37.219	23.399	1.00	50.86
16810	CZ	ARG	C	585	-70.968	-37.202	23.331	1.00	51.91
16811	NH1	ARG	C	585	-71.697	-37.606	24.374	1.00	51.70
16812	NH2	ARG	C	585	-71.569	-36.783	22.222	1.00	51.06
16813	C	ARG	C	585	-65.263	-36.202	27.657	1.00	50.87
16814	O	ARG	C	585	-64.944	-36.843	28.647	1.00	50.99
16815	N	GLN	C	586	-64.380	-35.704	26.799	1.00	52.00
16816	CA	GLN	C	586	-62.949	-35.898	26.966	1.00	53.14
16817	CB	GLN	C	586	-62.172	-35.141	25.885	1.00	53.53
16818	CG	GLN	C	586	-62.158	-35.834	24.536	1.00	54.41
16819	CD	GLN	C	586	-61.109	-36.929	24.459	1.00	56.50
16820	OE1	GLN	C	586	-61.412	-38.104	24.680	1.00	58.23

FIGURE 3 LR

A	B	C	D	E	F	G	H	I	J
16821	NE2	GLN	C	586	-59.874	-36.549	24.146	1.00	56.63
16822	C	GLN	C	586	-62.483	-35.472	28.349	1.00	53.50
16823	O	GLN	C	586	-61.595	-36.100	28.924	1.00	53.86
16824	N	PHE	C	587	-63.078	-34.412	28.889	1.00	53.98
16825	CA	PHE	C	587	-62.709	-33.969	30.228	1.00	54.32
16826	CB	PHE	C	587	-63.286	-32.591	30.550	1.00	54.34
16827	CG	PHE	C	587	-62.729	-31.495	29.701	1.00	54.30
16828	CD1	PHE	C	587	-61.388	-31.477	29.371	1.00	54.33
16829	CE1	PHE	C	587	-60.866	-30.469	28.582	1.00	54.45
16830	CZ	PHE	C	587	-61.689	-29.473	28.113	1.00	54.28
16831	CE2	PHE	C	587	-63.035	-29.486	28.426	1.00	54.02
16832	CD2	PHE	C	587	-63.548	-30.490	29.219	1.00	53.89
16833	C	PHE	C	587	-63.160	-34.986	31.259	1.00	54.60
16834	O	PHE	C	587	-62.455	-35.243	32.232	1.00	54.81
16835	N	SER	C	588	-64.330	-35.572	31.040	1.00	54.74
16836	CA	SER	C	588	-64.847	-36.578	31.958	1.00	55.47
16837	CB	SER	C	588	-66.258	-36.997	31.548	1.00	55.46
16838	OG	SER	C	588	-67.012	-35.864	31.159	1.00	56.80
16839	C	SER	C	588	-63.939	-37.810	32.042	1.00	55.46
16840	O	SER	C	588	-63.824	-38.439	33.090	1.00	55.32
16841	N	LYS	C	589	-63.288	-38.152	30.939	1.00	55.66
16842	CA	LYS	C	589	-62.434	-39.334	30.935	1.00	56.05
16843	CB	LYS	C	589	-62.231	-39.875	29.514	1.00	56.24
16844	CG	LYS	C	589	-63.528	-40.019	28.709	1.00	57.14
16845	CD	LYS	C	589	-64.678	-40.529	29.589	1.00	58.46
16846	CE	LYS	C	589	-66.029	-40.028	29.084	1.00	58.38
16847	NZ	LYS	C	589	-67.151	-40.300	30.036	1.00	57.94
16848	C	LYS	C	589	-61.100	-39.042	31.601	1.00	55.88
16849	O	LYS	C	589	-60.267	-39.929	31.763	1.00	56.10
16850	N	MET	C	590	-60.904	-37.791	31.996	1.00	55.61
16851	CA	MET	C	590	-59.666	-37.405	32.649	1.00	55.00
16852	CB	MET	C	590	-59.411	-35.909	32.499	1.00	55.18
16853	CG	MET	C	590	-59.012	-35.507	31.093	1.00	56.25
16854	SD	MET	C	590	-58.735	-33.724	30.931	1.00	57.90
16855	CE	MET	C	590	-58.014	-33.669	29.300	1.00	57.21
16856	C	MET	C	590	-59.685	-37.808	34.110	1.00	54.11
16857	O	MET	C	590	-58.660	-37.740	34.776	1.00	54.39
16858	N	GLY	C	591	-60.856	-38.192	34.613	1.00	53.15
16859	CA	GLY	C	591	-60.976	-38.744	35.956	1.00	51.80
16860	C	GLY	C	591	-61.267	-37.884	37.175	1.00	51.13
16861	O	GLY	C	591	-61.609	-38.416	38.223	1.00	51.07
16862	N	PHE	C	592	-61.133	-36.569	37.068	1.00	50.63
16863	CA	PHE	C	592	-61.378	-35.693	38.218	1.00	49.98
16864	CB	PHE	C	592	-60.184	-34.765	38.436	1.00	50.10
16865	CG	PHE	C	592	-59.627	-34.200	37.166	1.00	50.12
16866	CD1	PHE	C	592	-58.446	-34.691	36.635	1.00	50.15
16867	CE1	PHE	C	592	-57.935	-34.173	35.464	1.00	50.40
16868	CZ	PHE	C	592	-58.612	-33.154	34.803	1.00	50.89
16869	CE2	PHE	C	592	-59.789	-32.664	35.320	1.00	49.57
16870	CD2	PHE	C	592	-60.291	-33.187	36.496	1.00	49.76
16871	C	PHE	C	592	-62.659	-34.867	38.062	1.00	49.40

FIGURE 3 LS

A	B	C	D	E	F	G	H	I	J
16872	O	PHE	C	592	-62.833	-33.825	38.703	1.00	48.85
16873	N	VAL	C	593	-63.564	-35.350	37.221	1.00	48.83
16874	CA	VAL	C	593	-64.791	-34.621	36.942	1.00	48.30
16875	CB	VAL	C	593	-64.862	-34.235	35.457	1.00	48.35
16876	CG1	VAL	C	593	-66.216	-33.655	35.127	1.00	48.07
16877	CG2	VAL	C	593	-63.752	-33.253	35.106	1.00	48.30
16878	C	VAL	C	593	-66.054	-35.391	37.288	1.00	48.19
16879	O	VAL	C	593	-66.199	-36.569	36.939	1.00	48.02
16880	N	ASP	C	594	-66.970	-34.723	37.981	1.00	47.98
16881	CA	ASP	C	594	-68.253	-35.324	38.280	1.00	47.68
16882	CB	ASP	C	594	-68.964	-34.588	39.413	1.00	47.47
16883	CG	ASP	C	594	-70.240	-35.290	39.853	1.00	47.21
16884	OD1	ASP	C	594	-70.722	-35.011	40.970	1.00	46.89
16885	OD2	ASP	C	594	-70.835	-36.135	39.147	1.00	45.92
16886	C	ASP	C	594	-69.087	-35.250	37.019	1.00	48.03
16887	O	ASP	C	594	-69.548	-34.175	36.639	1.00	48.06
16888	N	ASN	C	595	-69.272	-36.395	36.367	1.00	48.29
16889	CA	ASN	C	595	-70.065	-36.476	35.149	1.00	48.38
16890	CB	ASN	C	595	-70.120	-37.922	34.650	1.00	48.96
16891	CG	ASN	C	595	-68.845	-38.346	33.948	1.00	51.36
16892	OD1	ASN	C	595	-67.808	-37.685	34.071	1.00	53.72
16893	ND2	ASN	C	595	-68.912	-39.454	33.205	1.00	51.67
16894	C	ASN	C	595	-71.489	-35.954	35.334	1.00	47.73
16895	O	ASN	C	595	-72.152	-35.582	34.367	1.00	47.69
16896	N	LYS	C	596	-71.965	-35.942	36.572	1.00	46.77
16897	CA	LYS	C	596	-73.324	-35.497	36.841	1.00	46.12
16898	CB	LYS	C	596	-73.893	-36.200	38.076	1.00	46.38
16899	CG	LYS	C	596	-74.107	-37.693	37.888	1.00	48.36
16900	CD	LYS	C	596	-74.951	-38.294	39.009	1.00	52.00
16901	CE	LYS	C	596	-74.335	-38.064	40.384	1.00	53.52
16902	NZ	LYS	C	596	-73.053	-38.801	40.581	1.00	55.00
16903	C	LYS	C	596	-73.422	-33.982	37.010	1.00	45.21
16904	O	LYS	C	596	-74.524	-33.428	37.026	1.00	45.12
16905	N	ARG	C	597	-72.279	-33.315	37.144	1.00	43.57
16906	CA	ARG	C	597	-72.288	-31.864	37.296	1.00	42.14
16907	CB	ARG	C	597	-71.996	-31.471	38.742	1.00	42.29
16908	CG	ARG	C	597	-73.052	-32.015	39.692	1.00	43.16
16909	CD	ARG	C	597	-72.836	-31.675	41.134	1.00	44.23
16910	NE	ARG	C	597	-71.517	-32.101	41.566	1.00	46.92
16911	CZ	ARG	C	597	-70.867	-31.580	42.594	1.00	46.35
16912	NH1	ARG	C	597	-71.419	-30.606	43.296	1.00	47.28
16913	NH2	ARG	C	597	-69.663	-32.028	42.915	1.00	46.60
16914	C	ARG	C	597	-71.376	-31.145	36.302	1.00	40.92
16915	O	ARG	C	597	-70.379	-30.553	36.668	1.00	40.12
16916	N	ILE	C	598	-71.746	-31.226	35.028	1.00	39.93
16917	CA	ILE	C	598	-71.036	-30.549	33.961	1.00	38.82
16918	CB	ILE	C	598	-70.729	-31.530	32.836	1.00	38.90
16919	CG1	ILE	C	598	-69.771	-32.620	33.329	1.00	39.16
16920	CD1	ILE	C	598	-69.535	-33.711	32.314	1.00	39.45
16921	CG2	ILE	C	598	-70.150	-30.804	31.638	1.00	37.40
16922	C	ILE	C	598	-71.959	-29.449	33.450	1.00	38.43



FIGURE 3 LT

A	B	C	D	E	F	G	H	I	J
16923	O	ILE	C	598	-73.123	-29.697	33.143	1.00	38.10
16924	N	ALA	C	599	-71.440	-28.232	33.369	1.00	37.43
16925	CA	ALA	C	599	-72.240	-27.108	32.938	1.00	36.53
16926	CB	ALA	C	599	-72.361	-26.093	34.057	1.00	36.78
16927	C	ALA	C	599	-71.625	-26.475	31.721	1.00	35.94
16928	O	ALA	C	599	-70.489	-26.786	31.354	1.00	36.54
16929	N	ILE	C	600	-72.375	-25.571	31.107	1.00	34.62
16930	CA	ILE	C	600	-71.947	-24.904	29.893	1.00	33.64
16931	CB	ILE	C	600	-72.403	-25.754	28.652	1.00	33.18
16932	CG1	ILE	C	600	-71.601	-25.455	27.388	1.00	33.22
16933	CD1	ILE	C	600	-71.251	-24.046	27.210	1.00	34.49
16934	CG2	ILE	C	600	-73.909	-25.698	28.423	1.00	33.99
16935	C	ILE	C	600	-72.540	-23.492	29.926	1.00	33.11
16936	O	ILE	C	600	-73.693	-23.313	30.307	1.00	33.14
16937	N	TRP	C	601	-71.726	-22.488	29.607	1.00	32.41
16938	CA	TRP	C	601	-72.182	-21.108	29.586	1.00	32.23
16939	CB	TRP	C	601	-72.082	-20.448	30.967	1.00	31.82
16940	CG	TRP	C	601	-70.841	-19.600	31.208	1.00	31.38
16941	CD1	TRP	C	601	-69.596	-20.050	31.531	1.00	31.05
16942	NE1	TRP	C	601	-68.738	-18.994	31.711	1.00	30.87
16943	CE2	TRP	C	601	-69.421	-17.825	31.515	1.00	30.19
16944	CD2	TRP	C	601	-70.751	-18.167	31.193	1.00	30.23
16945	CE3	TRP	C	601	-71.659	-17.135	30.935	1.00	29.79
16946	CZ3	TRP	C	601	-71.218	-15.813	31.001	1.00	29.38
16947	CH2	TRP	C	601	-69.884	-15.510	31.324	1.00	29.36
16948	CZ2	TRP	C	601	-68.972	-16.502	31.574	1.00	29.88
16949	C	TRP	C	601	-71.386	-20.297	28.590	1.00	31.88
16950	O	TRP	C	601	-70.202	-20.543	28.373	1.00	32.27
16951	N	GLY	C	602	-72.043	-19.327	27.988	1.00	31.47
16952	CA	GLY	C	602	-71.370	-18.457	27.045	1.00	31.55
16953	C	GLY	C	602	-72.167	-17.193	26.784	1.00	31.15
16954	O	GLY	C	602	-73.370	-17.166	26.989	1.00	31.09
16955	N	TRP	C	603	-71.477	-16.165	26.307	1.00	31.43
16956	CA	TRP	C	603	-72.052	-14.869	25.979	1.00	31.67
16957	CB	TRP	C	603	-71.208	-13.797	26.675	1.00	31.79
16958	CG	TRP	C	603	-71.834	-12.459	26.918	1.00	30.21
16959	CD1	TRP	C	603	-72.414	-11.632	26.003	1.00	28.51
16960	NE1	TRP	C	603	-72.847	-10.476	26.615	1.00	27.71
16961	CE2	TRP	C	603	-72.554	-10.542	27.951	1.00	28.88
16962	CD2	TRP	C	603	-71.903	-11.776	28.176	1.00	29.70
16963	CE3	TRP	C	603	-71.483	-12.086	29.477	1.00	28.49
16964	CZ3	TRP	C	603	-71.716	-11.176	30.487	1.00	30.03
16965	CH2	TRP	C	603	-72.354	-9.945	30.222	1.00	30.46
16966	CZ2	TRP	C	603	-72.780	-9.617	28.968	1.00	29.02
16967	C	TRP	C	603	-71.935	-14.679	24.472	1.00	32.12
16968	O	TRP	C	603	-70.895	-14.982	23.900	1.00	32.12
16969	N	SER	C	604	-72.992	-14.178	23.833	1.00	32.82
16970	CA	SER	C	604	-72.987	-13.888	22.388	1.00	33.24
16971	CB	SER	C	604	-71.887	-12.871	22.049	1.00	33.52
16972	OG	SER	C	604	-72.264	-12.037	20.949	1.00	35.24
16973	C	SER	C	604	-72.857	-15.162	21.550	1.00	33.18

FIGURE 3 LU

A	B	C	D	E	F	G	H	I	J
16974	O	SER	C	604	-73.732	-16.037	21.600	1.00	33.25
16975	N	TYR	C	605	-71.784	-15.276	20.773	1.00	33.40
16976	CA	TYR	C	605	-71.550	-16.501	20.015	1.00	33.41
16977	CB	TYR	C	605	-70.240	-16.454	19.221	1.00	33.56
16978	CG	TYR	C	605	-70.234	-17.447	18.081	1.00	33.91
16979	CD1	TYR	C	605	-70.399	-17.028	16.768	1.00	33.65
16980	CE1	TYR	C	605	-70.426	-17.937	15.725	1.00	34.31
16981	CZ	TYR	C	605	-70.288	-19.282	15.979	1.00	34.30
16982	OH	TYR	C	605	-70.304	-20.178	14.925	1.00	34.05
16983	CE2	TYR	C	605	-70.128	-19.734	17.273	1.00	33.84
16984	CD2	TYR	C	605	-70.108	-18.815	18.320	1.00	35.11
16985	C	TYR	C	605	-71.500	-17.643	21.010	1.00	33.18
16986	O	TYR	C	605	-71.911	-18.761	20.717	1.00	33.99
16987	N	GLY	C	606	-71.006	-17.357	22.202	1.00	33.02
16988	CA	GLY	C	606	-70.955	-18.367	23.243	1.00	32.79
16989	C	GLY	C	606	-72.326	-18.701	23.802	1.00	32.74
16990	O	GLY	C	606	-72.539	-19.787	24.353	1.00	32.95
16991	N	GLY	C	607	-73.260	-17.762	23.694	1.00	32.42
16992	CA	GLY	C	607	-74.621	-18.026	24.128	1.00	32.80
16993	C	GLY	C	607	-75.277	-18.928	23.101	1.00	32.99
16994	O	GLY	C	607	-76.028	-19.860	23.424	1.00	33.21
16995	N	TYR	C	608	-74.968	-18.647	21.846	1.00	32.78
16996	CA	TYR	C	608	-75.458	-19.452	20.749	1.00	33.55
16997	CB	TYR	C	608	-74.975	-18.856	19.422	1.00	33.33
16998	CG	TYR	C	608	-75.255	-19.701	18.208	1.00	34.41
16999	CD1	TYR	C	608	-74.218	-20.272	17.489	1.00	34.39
17000	CE1	TYR	C	608	-74.459	-21.028	16.378	1.00	33.71
17001	CZ	TYR	C	608	-75.738	-21.227	15.968	1.00	33.92
17002	OH	TYR	C	608	-75.965	-21.986	14.845	1.00	35.42
17003	CE2	TYR	C	608	-76.795	-20.671	16.658	1.00	34.18
17004	CD2	TYR	C	608	-76.550	-19.908	17.760	1.00	34.86
17005	C	TYR	C	608	-74.970	-20.891	20.934	1.00	33.89
17006	O	TYR	C	608	-75.778	-21.819	21.019	1.00	33.91
17007	N	VAL	C	609	-73.650	-21.071	21.027	1.00	34.10
17008	CA	VAL	C	609	-73.083	-22.418	21.168	1.00	34.52
17009	CB	VAL	C	609	-71.525	-22.410	21.147	1.00	34.97
17010	CG1	VAL	C	609	-70.956	-23.796	21.469	1.00	35.13
17011	CG2	VAL	C	609	-71.028	-21.918	19.800	1.00	34.79
17012	C	VAL	C	609	-73.617	-23.106	22.413	1.00	34.10
17013	O	VAL	C	609	-73.993	-24.264	22.359	1.00	34.11
17014	N	THR	C	610	-73.687	-22.384	23.529	1.00	34.16
17015	CA	THR	C	610	-74.262	-22.954	24.750	1.00	33.60
17016	CB	THR	C	610	-74.406	-21.878	25.846	1.00	33.65
17017	CG1	THR	C	610	-73.128	-21.568	26.398	1.00	34.10
17018	CG2	THR	C	610	-75.163	-22.406	27.037	1.00	32.30
17019	C	THR	C	610	-75.630	-23.516	24.449	1.00	33.87
17020	O	THR	C	610	-75.936	-24.666	24.768	1.00	34.43
17021	N	SER	C	611	-76.465	-22.697	23.824	1.00	34.11
17022	CA	SER	C	611	-77.837	-23.092	23.552	1.00	34.11
17023	CB	SER	C	611	-78.598	-21.929	22.920	1.00	34.29
17024	OG	SER	C	611	-78.484	-20.766	23.711	1.00	33.66

FIGURE 3 LV

A	B	C	D	E	F	G	H	I	J
17025	C	SER	C	611	-77.886	-24.281	22.618	1.00	34.42
17026	O	SER	C	611	-78.688	-25.198	22.797	1.00	34.17
17027	N	MET	C	612	-77.029	-24.250	21.605	1.00	35.04
17028	CA	MET	C	612	-76.975	-25.326	20.630	1.00	35.38
17029	CB	MET	C	612	-76.049	-24.947	19.480	1.00	35.10
17030	CG	MET	C	612	-76.579	-23.795	18.669	1.00	33.97
17031	SD	MET	C	612	-78.125	-24.240	17.800	1.00	35.94
17032	CE	MET	C	612	-77.390	-25.206	16.334	1.00	32.83
17033	C	MET	C	612	-76.530	-26.606	21.329	1.00	36.08
17034	O	MET	C	612	-77.085	-27.684	21.082	1.00	36.72
17035	N	VAL	C	613	-75.557	-26.492	22.227	1.00	35.96
17036	CA	VAL	C	613	-75.130	-27.666	22.978	1.00	36.62
17037	CB	VAL	C	613	-73.917	-27.375	23.899	1.00	36.20
17038	CG1	VAL	C	613	-73.677	-28.526	24.828	1.00	35.73
17039	CG2	VAL	C	613	-72.683	-27.109	23.082	1.00	35.75
17040	C	VAL	C	613	-76.305	-28.136	23.813	1.00	37.29
17041	O	VAL	C	613	-76.727	-29.276	23.719	1.00	38.04
17042	N	LEU	C	614	-76.851	-27.236	24.618	1.00	38.36
17043	CA	LEU	C	614	-77.979	-27.571	25.484	1.00	39.09
17044	CB	LEU	C	614	-78.514	-26.315	26.166	1.00	38.88
17045	CG	LEU	C	614	-77.630	-25.883	27.322	1.00	38.68
17046	CD1	LEU	C	614	-77.362	-27.100	28.172	1.00	38.39
17047	CD2	LEU	C	614	-78.308	-24.807	28.134	1.00	36.78
17048	C	LEU	C	614	-79.110	-28.255	24.753	1.00	39.45
17049	O	LEU	C	614	-79.832	-29.048	25.338	1.00	39.17
17050	N	GLY	C	615	-79.272	-27.932	23.473	1.00	40.51
17051	CA	GLY	C	615	-80.341	-28.504	22.676	1.00	40.87
17052	C	GLY	C	615	-79.888	-29.653	21.795	1.00	41.58
17053	O	GLY	C	615	-80.673	-30.168	20.986	1.00	41.90
17054	N	SER	C	616	-78.630	-30.062	21.951	1.00	41.72
17055	CA	SER	C	616	-78.069	-31.152	21.151	1.00	41.97
17056	CB	SER	C	616	-76.561	-31.195	21.314	1.00	41.68
17057	OG	SER	C	616	-76.249	-31.654	22.616	1.00	42.65
17058	C	SER	C	616	-78.633	-32.532	21.495	1.00	42.07
17059	O	SER	C	616	-78.662	-33.418	20.646	1.00	42.08
17060	N	GLY	C	617	-79.062	-32.719	22.740	1.00	42.26
17061	CA	GLY	C	617	-79.603	-33.997	23.173	1.00	42.25
17062	C	GLY	C	617	-78.494	-34.925	23.627	1.00	42.59
17063	O	GLY	C	617	-78.714	-36.110	23.901	1.00	42.33
17064	N	SER	C	618	-77.296	-34.359	23.739	1.00	42.64
17065	CA	SER	C	618	-76.098	-35.111	24.076	1.00	42.59
17066	CB	SER	C	618	-74.862	-34.216	23.969	1.00	42.56
17067	OG	SER	C	618	-74.743	-33.380	25.112	1.00	43.35
17068	C	SER	C	618	-76.138	-35.771	25.451	1.00	42.60
17069	O	SER	C	618	-75.524	-36.819	25.642	1.00	42.76
17070	N	GLY	C	619	-76.823	-35.152	26.413	1.00	42.31
17071	CA	GLY	C	619	-76.921	-35.706	27.759	1.00	41.39
17072	C	GLY	C	619	-75.720	-35.422	28.646	1.00	41.22
17073	O	GLY	C	619	-75.721	-35.717	29.839	1.00	41.55
17074	N	VAL	C	620	-74.690	-34.822	28.069	1.00	40.74
17075	CA	VAL	C	620	-73.464	-34.522	28.799	1.00	39.86

FIGURE 3 LW

A	B	C	D	E	F	G	H	I	J
17076	CB	VAL	C	620	-72.388	-34.083	27.811	1.00	39.67
17077	CG1	VAL	C	620	-71.107	-33.745	28.537	1.00	39.38
17078	CG2	VAL	C	620	-72.169	-35.168	26.779	1.00	39.20
17079	C	VAL	C	620	-73.625	-33.398	29.820	1.00	39.94
17080	O	VAL	C	620	-73.079	-33.439	30.932	1.00	39.36
17081	N	PHE	C	621	-74.372	-32.379	29.423	1.00	39.77
17082	CA	PHE	C	621	-74.543	-31.215	30.259	1.00	39.49
17083	CB	PHE	C	621	-74.423	-29.974	29.394	1.00	39.71
17084	CG	PHE	C	621	-73.097	-29.865	28.685	1.00	39.12
17085	CD1	PHE	C	621	-72.905	-30.470	27.454	1.00	39.23
17086	CE1	PHE	C	621	-71.685	-30.371	26.803	1.00	38.37
17087	CZ	PHE	C	621	-70.658	-29.655	27.380	1.00	37.67
17088	CE2	PHE	C	621	-70.838	-29.053	28.612	1.00	37.11
17089	CD2	PHE	C	621	-72.043	-29.160	29.257	1.00	36.87
17090	C	PHE	C	621	-75.856	-31.244	31.018	1.00	39.47
17091	O	PHE	C	621	-76.893	-31.674	30.521	1.00	39.87
17092	N	LYS	C	622	-75.803	-30.798	32.250	1.00	39.38
17093	CA	LYS	C	622	-76.977	-30.819	33.086	1.00	39.26
17094	CB	LYS	C	622	-76.521	-31.210	34.490	1.00	39.00
17095	CG	LYS	C	622	-77.546	-31.051	35.594	1.00	39.56
17096	CD	LYS	C	622	-76.865	-31.106	36.951	1.00	40.55
17097	CE	LYS	C	622	-77.826	-31.472	38.067	1.00	41.54
17098	NZ	LYS	C	622	-78.564	-30.300	38.587	1.00	43.09
17099	C	LYS	C	622	-77.480	-29.403	33.136	1.00	38.96
17100	O	LYS	C	622	-78.568	-29.125	33.632	1.00	38.86
17101	N	CYS	C	623	-76.704	-28.523	32.527	1.00	38.77
17102	CA	CYS	C	623	-76.767	-27.148	32.913	1.00	38.86
17103	CB	CYS	C	623	-75.829	-27.102	34.099	1.00	40.12
17104	SG	CYS	C	623	-76.401	-26.181	35.452	1.00	43.70
17105	C	CYS	C	623	-76.116	-26.210	31.958	1.00	37.46
17106	O	CYS	C	623	-75.035	-26.509	31.446	1.00	37.36
17107	N	GLY	C	624	-76.702	-25.027	31.806	1.00	36.02
17108	CA	GLY	C	624	-76.106	-24.025	30.953	1.00	34.25
17109	C	GLY	C	624	-76.740	-22.657	31.009	1.00	32.76
17110	O	GLY	C	624	-77.937	-22.514	31.265	1.00	32.76
17111	N	ILE	C	625	-75.916	-21.649	30.757	1.00	31.31
17112	CA	ILE	C	625	-76.359	-20.271	30.753	1.00	29.91
17113	CB	ILE	C	625	-75.690	-19.477	31.867	1.00	29.76
17114	CG1	ILE	C	625	-75.939	-20.154	33.218	1.00	29.14
17115	CD1	ILE	C	625	-75.396	-19.370	34.398	1.00	30.29
17116	CG2	ILE	C	625	-76.190	-18.033	31.844	1.00	27.52
17117	C	ILE	C	625	-75.992	-19.629	29.444	1.00	29.26
17118	O	ILE	C	625	-74.817	-19.590	29.087	1.00	29.27
17119	N	ALA	C	626	-76.998	-19.140	28.731	1.00	28.47
17120	CA	ALA	C	626	-76.773	-18.382	27.509	1.00	28.34
17121	CB	ALA	C	626	-77.692	-18.864	26.379	1.00	27.97
17122	C	ALA	C	626	-77.034	-16.920	27.804	1.00	28.30
17123	O	ALA	C	626	-78.106	-16.548	28.293	1.00	28.46
17124	N	VAL	C	627	-76.042	-16.088	27.527	1.00	28.44
17125	CA	VAL	C	627	-76.198	-14.657	27.699	1.00	28.35
17126	CB	VAL	C	627	-75.099	-14.081	28.587	1.00	28.72

FIGURE 3 LX

A	B	C	D	E	F	G	H	I	J
17127	CG1	VAL	C	627	-75.289	-12.579	28.744	1.00	27.70
17128	CG2	VAL	C	627	-75.069	-14.806	29.950	1.00	28.15
17129	C	VAL	C	627	-76.095	-13.988	26.331	1.00	28.29
17130	O	VAL	C	627	-75.111	-14.178	25.614	1.00	28.29
17131	N	ALA	C	628	-77.119	-13.223	25.974	1.00	27.39
17132	CA	ALA	C	628	-77.144	-12.475	24.713	1.00	26.74
17133	CB	ALA	C	628	-76.253	-11.263	24.813	1.00	26.49
17134	C	ALA	C	628	-76.772	-13.325	23.510	1.00	26.29
17135	O	ALA	C	628	-75.975	-12.941	22.674	1.00	25.93
17136	N	PRO	C	629	-77.404	-14.474	23.400	1.00	26.54
17137	CA	PRO	C	629	-77.091	-15.421	22.347	1.00	26.91
17138	CB	PRO	C	629	-77.784	-16.671	22.874	1.00	26.98
17139	CG	PRO	C	629	-79.035	-16.108	23.393	1.00	25.93
17140	CD	PRO	C	629	-78.485	-14.985	24.256	1.00	26.49
17141	C	PRO	C	629	-77.716	-15.068	21.005	1.00	27.71
17142	O	PRO	C	629	-78.839	-14.531	20.928	1.00	27.00
17143	N	VAL	C	630	-76.982	-15.368	19.941	1.00	28.10
17144	CA	VAL	C	630	-77.574	-15.331	18.630	1.00	28.32
17145	CB	VAL	C	630	-76.514	-15.487	17.535	1.00	28.26
17146	CG1	VAL	C	630	-77.167	-15.871	16.205	1.00	27.63
17147	CG2	VAL	C	630	-75.705	-14.228	17.378	1.00	27.55
17148	C	VAL	C	630	-78.424	-16.600	18.698	1.00	28.99
17149	O	VAL	C	630	-78.030	-17.549	19.367	1.00	29.78
17150	N	SER	C	631	-79.584	-16.614	18.055	1.00	29.40
17151	CA	SER	C	631	-80.460	-17.785	18.043	1.00	29.82
17152	CB	SER	C	631	-81.768	-17.481	18.752	1.00	29.67
17153	OG	SER	C	631	-82.450	-16.468	18.067	1.00	28.41
17154	C	SER	C	631	-80.762	-18.255	16.620	1.00	30.66
17155	O	SER	C	631	-81.152	-19.396	16.413	1.00	30.31
17156	N	ARG	C	632	-80.625	-17.353	15.651	1.00	31.60
17157	CA	ARG	C	632	-80.727	-17.726	14.252	1.00	33.04
17158	CB	ARG	C	632	-82.170	-17.890	13.790	1.00	33.95
17159	CG	ARG	C	632	-82.839	-16.622	13.450	1.00	35.70
17160	CD	ARG	C	632	-83.911	-16.736	12.385	1.00	40.20
17161	NE	ARG	C	632	-84.374	-18.089	12.152	1.00	42.40
17162	CZ	ARG	C	632	-85.235	-18.397	11.185	1.00	45.70
17163	NH1	ARG	C	632	-85.622	-19.658	11.002	1.00	43.76
17164	NH2	ARG	C	632	-85.718	-17.430	10.397	1.00	45.81
17165	C	ARG	C	632	-79.981	-16.692	13.426	1.00	33.22
17166	O	ARG	C	632	-80.112	-15.485	13.638	1.00	33.56
17167	N	TRP	C	633	-79.195	-17.166	12.472	1.00	33.29
17168	CA	TRP	C	633	-78.300	-16.276	11.763	1.00	33.58
17169	CB	TRP	C	633	-77.226	-17.071	11.000	1.00	33.49
17170	CG	TRP	C	633	-76.340	-17.724	12.012	1.00	33.94
17171	CD1	TRP	C	633	-76.351	-19.030	12.398	1.00	33.15
17172	NE1	TRP	C	633	-75.434	-19.231	13.400	1.00	34.18
17173	CE2	TRP	C	633	-74.813	-18.039	13.679	1.00	33.45
17174	CD2	TRP	C	633	-75.374	-17.069	12.840	1.00	33.32
17175	CE3	TRP	C	633	-74.910	-15.753	12.937	1.00	34.06
17176	CZ3	TRP	C	633	-73.930	-15.455	13.850	1.00	33.46
17177	CH2	TRP	C	633	-73.388	-16.446	14.668	1.00	34.25

FIGURE 3 LY

A	B	C	D	E	F	G	H	I	J
17178	CZ2	TRP	C	633	-73.819	-17.741	14.599	1.00	33.75
17179	C	TRP	C	633	-78.943	-15.144	10.967	1.00	33.52
17180	O	TRP	C	633	-78.325	-14.102	10.782	1.00	34.23
17181	N	GLU	C	634	-80.180	-15.324	10.532	1.00	33.78
17182	CA	GLU	C	634	-80.861	-14.253	9.806	1.00	34.16
17183	CB	GLU	C	634	-82.202	-14.717	9.255	1.00	34.07
17184	CG	GLU	C	634	-82.108	-15.639	8.054	1.00	36.42
17185	CD	GLU	C	634	-82.418	-17.078	8.414	1.00	39.31
17186	OE1	GLU	C	634	-83.359	-17.642	7.807	1.00	38.59
17187	OE2	GLU	C	634	-81.735	-17.627	9.322	1.00	40.88
17188	C	GLU	C	634	-81.081	-13.009	10.671	1.00	33.84
17189	O	GLU	C	634	-81.339	-11.922	10.151	1.00	33.64
17190	N	TYR	C	635	-80.983	-13.163	11.989	1.00	32.97
17191	CA	TYR	C	635	-81.240	-12.039	12.867	1.00	32.19
17192	CB	TYR	C	635	-81.641	-12.530	14.252	1.00	32.26
17193	CG	TYR	C	635	-82.968	-13.267	14.341	1.00	31.06
17194	CD1	TYR	C	635	-84.000	-13.015	13.451	1.00	31.62
17195	CE1	TYR	C	635	-85.217	-13.688	13.555	1.00	30.68
17196	CZ	TYR	C	635	-85.386	-14.602	14.550	1.00	28.71
17197	OH	TYR	C	635	-86.559	-15.277	14.674	1.00	29.34
17198	CE2	TYR	C	635	-84.385	-14.845	15.446	1.00	30.12
17199	CD2	TYR	C	635	-83.183	-14.187	15.334	1.00	28.26
17200	C	TYR	C	635	-80.014	-11.184	13.045	1.00	32.11
17201	O	TYR	C	635	-80.118	-10.059	13.495	1.00	32.11
17202	N	TYR	C	636	-78.849	-11.725	12.718	1.00	31.77
17203	CA	TYR	C	636	-77.602	-11.031	13.008	1.00	32.19
17204	CB	TYR	C	636	-76.530	-12.012	13.549	1.00	31.98
17205	CG	TYR	C	636	-75.428	-11.293	14.289	1.00	31.71
17206	CD1	TYR	C	636	-75.727	-10.444	15.340	1.00	30.05
17207	CE1	TYR	C	636	-74.741	-9.739	15.991	1.00	28.81
17208	CZ	TYR	C	636	-73.434	-9.888	15.598	1.00	27.74
17209	OH	TYR	C	636	-72.454	-9.194	16.241	1.00	25.92
17210	CE2	TYR	C	636	-73.104	-10.722	14.556	1.00	28.79
17211	CD2	TYR	C	636	-74.096	-11.420	13.904	1.00	30.86
17212	C	TYR	C	636	-77.117	-10.207	11.827	1.00	32.70
17213	O	TYR	C	636	-77.584	-10.390	10.700	1.00	32.60
17214	N	ASP	C	637	-76.191	-9.288	12.094	1.00	34.23
17215	CA	ASP	C	637	-75.706	-8.349	11.081	1.00	34.69
17216	CB	ASP	C	637	-74.807	-7.272	11.686	1.00	34.90
17217	CG	ASP	C	637	-73.408	-7.769	12.010	1.00	36.72
17218	OD1	ASP	C	637	-72.629	-8.121	11.087	1.00	37.39
17219	OD2	ASP	C	637	-72.977	-7.786	13.182	1.00	39.27
17220	C	ASP	C	637	-75.029	-9.002	9.887	1.00	35.51
17221	O	ASP	C	637	-74.316	-10.016	10.011	1.00	35.91
17222	N	SER	C	638	-75.250	-8.378	8.735	1.00	35.24
17223	CA	SER	C	638	-74.774	-8.863	7.445	1.00	35.54
17224	CB	SER	C	638	-75.170	-7.854	6.358	1.00	35.16
17225	OG	SER	C	638	-74.367	-6.697	6.489	1.00	33.95
17226	C	SER	C	638	-73.271	-9.144	7.346	1.00	35.66
17227	O	SER	C	638	-72.873	-10.247	7.023	1.00	35.12
17228	N	VAL	C	639	-72.444	-8.137	7.597	1.00	36.79

FIGURE 3 LZ

A	B	C	D	E	F	G	H	I	J
17229	CA	VAL	C	639	-71.006	-8.313	7.433	1.00	37.50
17230	CB	VAL	C	639	-70.204	-6.982	7.587	1.00	37.62
17231	CG1	VAL	C	639	-68.771	-7.243	7.990	1.00	36.07
17232	CG2	VAL	C	639	-70.860	-6.060	8.554	1.00	37.50
17233	C	VAL	C	639	-70.442	-9.478	8.249	1.00	38.49
17234	O	VAL	C	639	-69.700	-10.305	7.712	1.00	39.33
17235	N	TYR	C	640	-70.821	-9.593	9.516	1.00	39.06
17236	CA	TYR	C	640	-70.324	-10.709	10.327	1.00	39.24
17237	CB	TYR	C	640	-70.677	-10.533	11.794	1.00	39.23
17238	CG	TYR	C	640	-70.104	-11.611	12.689	1.00	39.59
17239	CD1	TYR	C	640	-68.868	-11.439	13.299	1.00	40.35
17240	CE1	TYR	C	640	-68.331	-12.411	14.123	1.00	40.39
17241	CZ	TYR	C	640	-69.035	-13.575	14.354	1.00	40.21
17242	OH	TYR	C	640	-68.490	-14.526	15.188	1.00	40.53
17243	CE2	TYR	C	640	-70.270	-13.773	13.767	1.00	38.88
17244	CD2	TYR	C	640	-70.798	-12.792	12.937	1.00	39.33
17245	C	TYR	C	640	-70.906	-12.022	9.879	1.00	39.48
17246	O	TYR	C	640	-70.180	-12.999	9.674	1.00	39.99
17247	N	THR	C	641	-72.224	-12.057	9.744	1.00	39.54
17248	CA	THR	C	641	-72.906	-13.295	9.404	1.00	39.60
17249	CB	THR	C	641	-74.422	-13.083	9.439	1.00	39.84
17250	OG1	THR	C	641	-74.832	-12.695	10.759	1.00	38.30
17251	CG2	THR	C	641	-75.174	-14.412	9.166	1.00	39.08
17252	C	THR	C	641	-72.481	-13.894	8.054	1.00	40.26
17253	O	THR	C	641	-71.993	-15.020	7.999	1.00	40.38
17254	N	GLU	C	642	-72.670	-13.137	6.979	1.00	40.73
17255	CA	GLU	C	642	-72.374	-13.600	5.620	1.00	41.55
17256	CB	GLU	C	642	-72.769	-12.504	4.629	1.00	41.64
17257	CG	GLU	C	642	-74.212	-12.058	4.818	1.00	41.31
17258	CD	GLU	C	642	-74.503	-10.705	4.223	1.00	40.79
17259	OE1	GLU	C	642	-73.554	-10.053	3.752	1.00	41.89
17260	OE2	GLU	C	642	-75.684	-10.290	4.239	1.00	40.01
17261	C	GLU	C	642	-70.919	-14.050	5.413	1.00	42.17
17262	O	GLU	C	642	-70.633	-15.006	4.685	1.00	42.48
17263	N	ARG	C	643	-70.006	-13.348	6.066	1.00	42.70
17264	CA	ARG	C	643	-68.597	-13.698	6.064	1.00	42.56
17265	CB	ARG	C	643	-67.893	-12.953	7.199	1.00	42.28
17266	CG	ARG	C	643	-66.442	-13.299	7.370	1.00	41.76
17267	CD	ARG	C	643	-65.778	-12.557	8.516	1.00	41.43
17268	NE	ARG	C	643	-66.051	-11.127	8.492	1.00	40.24
17269	CZ	ARG	C	643	-66.102	-10.357	9.574	1.00	39.75
17270	NH1	ARG	C	643	-66.364	-9.051	9.452	1.00	37.41
17271	NH2	ARG	C	643	-65.892	-10.891	10.779	1.00	37.15
17272	C	ARG	C	643	-68.405	-15.188	6.265	1.00	42.95
17273	O	ARG	C	643	-67.512	-15.797	5.658	1.00	43.32
17274	N	TYR	C	644	-69.230	-15.776	7.126	1.00	42.77
17275	CA	TYR	C	644	-69.121	-17.204	7.412	1.00	43.05
17276	CB	TYR	C	644	-69.031	-17.458	8.925	1.00	42.61
17277	CG	TYR	C	644	-68.128	-16.507	9.650	1.00	41.89
17278	CD1	TYR	C	644	-66.789	-16.402	9.312	1.00	41.82
17279	CE1	TYR	C	644	-65.960	-15.529	9.962	1.00	40.56

FIGURE 3 MA

A	B	C	D	E	F	G	H	I	J
17280	CZ	TYR	C	644	-66.462	-14.748	10.966	1.00	40.93
17281	OH	TYR	C	644	-65.636	-13.869	11.616	1.00	42.11
17282	CE2	TYR	C	644	-67.790	-14.825	11.319	1.00	41.34
17283	CD2	TYR	C	644	-68.614	-15.699	10.661	1.00	41.55
17284	C	TYR	C	644	-70.294	-18.009	6.892	1.00	43.28
17285	O	TYR	C	644	-70.234	-19.233	6.856	1.00	43.75
17286	N	MET	C	645	-71.373	-17.351	6.502	1.00	43.62
17287	CA	MET	C	645	-72.560	-18.125	6.152	1.00	44.32
17288	CB	MET	C	645	-73.691	-17.847	7.158	1.00	44.38
17289	CG	MET	C	645	-73.467	-18.442	8.534	1.00	43.62
17290	SD	MET	C	645	-74.103	-20.120	8.619	1.00	44.50
17291	CE	MET	C	645	-75.862	-19.820	8.342	1.00	41.22
17292	C	MET	C	645	-73.071	-17.907	4.740	1.00	44.74
17293	O	MET	C	645	-73.955	-18.633	4.294	1.00	44.86
17294	N	GLY	C	646	-72.524	-16.926	4.036	1.00	45.12
17295	CA	GLY	C	646	-73.048	-16.599	2.721	1.00	46.52
17296	C	GLY	C	646	-74.415	-15.956	2.893	1.00	47.23
17297	O	GLY	C	646	-74.722	-15.437	3.965	1.00	47.68
17298	N	LEU	C	647	-75.252	-15.992	1.865	1.00	47.94
17299	CA	LEU	C	647	-76.563	-15.359	1.976	1.00	48.69
17300	CB	LEU	C	647	-76.905	-14.568	0.710	1.00	48.71
17301	CG	LEU	C	647	-75.854	-13.625	0.133	1.00	49.78
17302	CD1	LEU	C	647	-75.447	-12.544	1.152	1.00	50.66
17303	CD2	LEU	C	647	-74.641	-14.387	-0.374	1.00	50.76
17304	C	LEU	C	647	-77.683	-16.343	2.294	1.00	48.89
17305	O	LEU	C	647	-77.620	-17.510	1.932	1.00	48.43
17306	N	PRO	C	648	-78.710	-15.845	2.976	1.00	49.42
17307	CA	PRO	C	648	-79.881	-16.644	3.332	1.00	50.21
17308	CB	PRO	C	648	-80.548	-15.814	4.434	1.00	49.80
17309	CG	PRO	C	648	-79.631	-14.702	4.706	1.00	49.54
17310	CD	PRO	C	648	-78.833	-14.467	3.470	1.00	49.59
17311	C	PRO	C	648	-80.865	-16.811	2.169	1.00	50.95
17312	O	PRO	C	648	-82.052	-16.998	2.424	1.00	51.46
17313	N	THR	C	649	-80.401	-16.718	0.926	1.00	51.64
17314	CA	THR	C	649	-81.271	-16.987	-0.222	1.00	52.36
17315	CB	THR	C	649	-80.887	-16.118	-1.421	1.00	52.18
17316	OG1	THR	C	649	-79.719	-16.663	-2.043	1.00	53.23
17317	CG2	THR	C	649	-80.432	-14.743	-0.972	1.00	52.56
17318	C	THR	C	649	-81.130	-18.449	-0.617	1.00	52.58
17319	O	THR	C	649	-80.092	-19.058	-0.375	1.00	52.70
17320	N	PRO	C	650	-82.172	-19.005	-1.228	1.00	53.12
17321	CA	PRO	C	650	-82.174	-20.401	-1.683	1.00	53.38
17322	CB	PRO	C	650	-83.490	-20.500	-2.457	1.00	53.46
17323	CG	PRO	C	650	-84.370	-19.497	-1.820	1.00	52.99
17324	CD	PRO	C	650	-83.456	-18.338	-1.503	1.00	53.43
17325	C	PRO	C	650	-81.004	-20.780	-2.603	1.00	53.75
17326	O	PRO	C	650	-80.548	-21.925	-2.594	1.00	53.62
17327	N	GLU	C	651	-80.519	-19.829	-3.388	1.00	53.94
17328	CA	GLU	C	651	-79.435	-20.122	-4.312	1.00	54.28
17329	CB	GLU	C	651	-79.485	-19.166	-5.506	1.00	54.69
17330	CG	GLU	C	651	-79.984	-17.767	-5.166	1.00	56.36



FIGURE 3 MB

A	B	C	D	E	F	G	H	I	J
17331	CD	GLU	C	651	-81.499	-17.698	-5.036	1.00	58.57
17332	OE1	GLU	C	651	-82.025	-16.628	-4.646	1.00	59.40
17333	OE2	GLU	C	651	-82.169	-18.714	-5.335	1.00	59.57
17334	C	GLU	C	651	-78.065	-20.076	-3.636	1.00	54.06
17335	O	GLU	C	651	-77.039	-20.329	-4.276	1.00	54.13
17336	N	ASP	C	652	-78.039	-19.750	-2.347	1.00	53.63
17337	CA	ASP	C	652	-76.768	-19.721	-1.626	1.00	53.20
17338	CB	ASP	C	652	-76.393	-18.299	-1.180	1.00	53.09
17339	CG	ASP	C	652	-74.964	-18.204	-0.671	1.00	53.49
17340	OD1	ASP	C	652	-74.409	-17.082	-0.630	1.00	52.38
17341	OD2	ASP	C	652	-74.308	-19.198	-0.287	1.00	55.11
17342	C	ASP	C	652	-76.764	-20.689	-0.459	1.00	52.74
17343	O	ASP	C	652	-76.537	-21.877	-0.650	1.00	52.89
17344	N	ASN	C	653	-77.058	-20.195	0.740	1.00	52.38
17345	CA	ASN	C	653	-76.958	-21.015	1.947	1.00	51.91
17346	CB	ASN	C	653	-75.732	-20.560	2.746	1.00	51.79
17347	CG	ASN	C	653	-75.163	-21.652	3.633	1.00	51.84
17348	OD1	ASN	C	653	-75.298	-22.846	3.345	1.00	50.92
17349	ND2	ASN	C	653	-74.511	-21.242	4.722	1.00	51.55
17350	C	ASN	C	653	-78.197	-21.036	2.858	1.00	51.68
17351	O	ASN	C	653	-78.134	-21.541	3.974	1.00	51.25
17352	N	LEU	C	654	-79.323	-20.509	2.381	1.00	51.80
17353	CA	LEU	C	654	-80.551	-20.457	3.188	1.00	51.68
17354	CB	LEU	C	654	-81.763	-20.065	2.332	1.00	51.72
17355	CG	LEU	C	654	-83.106	-19.868	3.052	1.00	51.87
17356	CD1	LEU	C	654	-84.130	-19.231	2.120	1.00	51.14
17357	CD2	LEU	C	654	-82.949	-19.028	4.314	1.00	50.32
17358	C	LEU	C	654	-80.852	-21.739	3.965	1.00	51.39
17359	O	LEU	C	654	-81.305	-21.686	5.104	1.00	51.54
17360	N	ASP	C	655	-80.593	-22.886	3.355	1.00	51.05
17361	CA	ASP	C	655	-80.874	-24.168	3.998	1.00	50.87
17362	CB	ASP	C	655	-80.578	-25.345	3.053	1.00	51.10
17363	CG	ASP	C	655	-81.760	-25.680	2.161	1.00	52.25
17364	OD1	ASP	C	655	-82.465	-24.714	1.761	1.00	52.48
17365	OD2	ASP	C	655	-82.058	-26.860	1.827	1.00	53.32
17366	C	ASP	C	655	-80.147	-24.373	5.319	1.00	50.12
17367	O	ASP	C	655	-80.720	-24.894	6.279	1.00	50.29
17368	N	HIS	C	656	-78.882	-23.999	5.384	1.00	49.10
17369	CA	HIS	C	656	-78.208	-24.179	6.657	1.00	48.21
17370	CB	HIS	C	656	-76.698	-24.334	6.535	1.00	47.87
17371	CG	HIS	C	656	-76.060	-24.652	7.844	1.00	48.13
17372	ND1	HIS	C	656	-76.313	-25.826	8.519	1.00	48.39
17373	CE1	HIS	C	656	-75.669	-25.814	9.671	1.00	48.27
17374	NE2	HIS	C	656	-75.019	-24.667	9.774	1.00	48.51
17375	CD2	HIS	C	656	-75.264	-23.913	8.653	1.00	48.48
17376	C	HIS	C	656	-78.573	-23.069	7.647	1.00	47.37
17377	O	HIS	C	656	-78.608	-23.291	8.852	1.00	46.92
17378	N	TYR	C	657	-78.830	-21.875	7.122	1.00	46.50
17379	CA	TYR	C	657	-79.300	-20.771	7.939	1.00	45.81
17380	CB	TYR	C	657	-79.815	-19.648	7.067	1.00	45.25
17381	CG	TYR	C	657	-78.849	-18.536	6.805	1.00	43.24

FIGURE 3 MC

A	B	C	D	E	F	G	H	I	J
17382	CD1	TYR	C	657	-78.766	-17.443	7.660	1.00	41.96
17383	CE1	TYR	C	657	-77.898	-16.411	7.404	1.00	39.72
17384	CZ	TYR	C	657	-77.112	-16.464	6.282	1.00	40.47
17385	OH	TYR	C	657	-76.239	-15.455	5.988	1.00	41.83
17386	CE2	TYR	C	657	-77.187	-17.533	5.425	1.00	40.94
17387	CD2	TYR	C	657	-78.054	-18.550	5.685	1.00	40.78
17388	C	TYR	C	657	-80.469	-21.254	8.748	1.00	45.87
17389	O	TYR	C	657	-80.565	-20.961	9.930	1.00	46.43
17390	N	ARG	C	658	-81.356	-21.994	8.094	1.00	45.67
17391	CA	ARG	C	658	-82.578	-22.486	8.710	1.00	45.95
17392	CB	ARG	C	658	-83.594	-22.896	7.631	1.00	46.28
17393	CG	ARG	C	658	-84.217	-21.740	6.844	1.00	49.14
17394	CD	ARG	C	658	-85.595	-22.064	6.211	1.00	53.51
17395	NE	ARG	C	658	-85.507	-23.075	5.154	1.00	56.60
17396	CZ	ARG	C	658	-86.363	-23.193	4.136	1.00	57.79
17397	NH1	ARG	C	658	-87.397	-22.363	4.020	1.00	56.87
17398	NH2	ARG	C	658	-86.183	-24.152	3.232	1.00	57.59
17399	C	ARG	C	658	-82.364	-23.675	9.627	1.00	45.54
17400	O	ARG	C	658	-83.191	-23.934	10.508	1.00	45.95
17401	N	ASN	C	659	-81.275	-24.411	9.417	1.00	44.74
17402	CA	ASN	C	659	-81.036	-25.635	10.176	1.00	44.08
17403	CB	ASN	C	659	-80.447	-26.724	9.272	1.00	44.64
17404	CG	ASN	C	659	-81.224	-28.033	9.352	1.00	46.95
17405	OD1	ASN	C	659	-82.133	-28.278	8.542	1.00	49.62
17406	ND2	ASN	C	659	-80.877	-28.882	10.327	1.00	47.89
17407	C	ASN	C	659	-80.141	-25.434	11.382	1.00	42.91
17408	O	ASN	C	659	-79.922	-26.354	12.171	1.00	42.51
17409	N	SER	C	660	-79.623	-24.227	11.534	1.00	41.70
17410	CA	SER	C	660	-78.737	-23.962	12.648	1.00	40.66
17411	CB	SER	C	660	-77.410	-23.428	12.128	1.00	40.52
17412	OG	SER	C	660	-77.629	-22.383	11.198	1.00	40.66
17413	C	SER	C	660	-79.327	-23.003	13.685	1.00	40.04
17414	O	SER	C	660	-78.578	-22.306	14.360	1.00	39.96
17415	N	THR	C	661	-80.655	-22.943	13.797	1.00	39.09
17416	CA	THR	C	661	-81.268	-22.085	14.811	1.00	38.03
17417	CB	THR	C	661	-82.651	-21.556	14.384	1.00	37.96
17418	OG1	THR	C	661	-83.595	-22.625	14.403	1.00	36.52
17419	CG2	THR	C	661	-82.645	-21.050	12.935	1.00	37.45
17420	C	THR	C	661	-81.429	-22.900	16.071	1.00	37.79
17421	O	THR	C	661	-81.553	-24.124	16.002	1.00	37.47
17422	N	VAL	C	662	-81.454	-22.238	17.223	1.00	37.13
17423	CA	VAL	C	662	-81.608	-22.985	18.462	1.00	36.62
17424	CB	VAL	C	662	-80.973	-22.272	19.710	1.00	36.83
17425	CG1	VAL	C	662	-79.942	-21.246	19.294	1.00	34.84
17426	CG2	VAL	C	662	-82.033	-21.661	20.611	1.00	35.45
17427	C	VAL	C	662	-83.070	-23.278	18.691	1.00	36.93
17428	O	VAL	C	662	-83.415	-24.280	19.310	1.00	37.33
17429	N	MET	C	663	-83.935	-22.405	18.186	1.00	36.78
17430	CA	MET	C	663	-85.360	-22.594	18.354	1.00	36.89
17431	CB	MET	C	663	-86.158	-21.560	17.547	1.00	36.76
17432	CG	MET	C	663	-86.341	-20.212	18.227	1.00	35.06

FIGURE 3 MD

A	B	C	D	E	F	G	H	I	J
17433	SD	MET	C	663	-84.846	-19.194	18.177	1.00	35.84
17434	CE	MET	C	663	-84.752	-18.696	16.489	1.00	33.06
17435	C	MET	C	663	-85.745	-23.991	17.901	1.00	37.82
17436	O	MET	C	663	-86.563	-24.653	18.542	1.00	37.81
17437	N	SER	C	664	-85.164	-24.434	16.785	1.00	38.23
17438	CA	SER	C	664	-85.488	-25.742	16.245	1.00	38.98
17439	CB	SER	C	664	-84.933	-25.914	14.823	1.00	39.11
17440	OG	SER	C	664	-83.603	-26.398	14.846	1.00	40.80
17441	C	SER	C	664	-85.023	-26.867	17.174	1.00	39.18
17442	O	SER	C	664	-85.478	-28.007	17.063	1.00	39.51
17443	N	ARG	C	665	-84.141	-26.553	18.114	1.00	39.11
17444	CA	ARG	C	665	-83.720	-27.572	19.072	1.00	39.15
17445	CB	ARG	C	665	-82.228	-27.470	19.368	1.00	39.15
17446	CG	ARG	C	665	-81.342	-27.778	18.183	1.00	40.16
17447	CD	ARG	C	665	-79.919	-27.302	18.347	1.00	41.92
17448	NE	ARG	C	665	-79.079	-27.770	17.256	1.00	44.94
17449	CZ	ARG	C	665	-77.992	-28.514	17.413	1.00	46.14
17450	NH1	ARG	C	665	-77.605	-28.882	18.631	1.00	44.85
17451	NH2	ARG	C	665	-77.290	-28.891	16.346	1.00	47.15
17452	C	ARG	C	665	-84.509	-27.516	20.382	1.00	38.90
17453	O	ARG	C	665	-84.120	-28.159	21.351	1.00	38.81
17454	N	ALA	C	666	-85.628	-26.791	20.390	1.00	38.39
17455	CA	ALA	C	666	-86.407	-26.563	21.611	1.00	38.76
17456	CB	ALA	C	666	-87.659	-25.746	21.305	1.00	38.34
17457	C	ALA	C	666	-86.776	-27.789	22.453	1.00	39.08
17458	O	ALA	C	666	-86.478	-27.836	23.641	1.00	38.98
17459	N	GLU	C	667	-87.440	-28.760	21.836	1.00	39.50
17460	CA	GLU	C	667	-87.873	-29.976	22.514	1.00	40.65
17461	CB	GLU	C	667	-88.408	-30.972	21.471	1.00	41.61
17462	CG	GLU	C	667	-88.745	-32.358	22.006	1.00	44.39
17463	CD	GLU	C	667	-90.028	-32.388	22.815	1.00	48.67
17464	OE1	GLU	C	667	-90.139	-33.247	23.720	1.00	50.22
17465	OE2	GLU	C	667	-90.929	-31.559	22.545	1.00	50.72
17466	C	GLU	C	667	-86.790	-30.632	23.386	1.00	40.22
17467	O	GLU	C	667	-87.086	-31.230	24.414	1.00	40.14
17468	N	ASN	C	668	-85.537	-30.516	22.971	1.00	40.21
17469	CA	ASN	C	668	-84.435	-31.109	23.713	1.00	40.53
17470	CB	ASN	C	668	-83.204	-31.267	22.810	1.00	40.59
17471	CG	ASN	C	668	-83.375	-32.380	21.780	1.00	41.30
17472	OD1	ASN	C	668	-84.167	-33.307	21.972	1.00	41.08
17473	ND2	ASN	C	668	-82.626	-32.296	20.683	1.00	41.87
17474	C	ASN	C	668	-84.068	-30.395	25.022	1.00	40.58
17475	O	ASN	C	668	-83.437	-30.997	25.891	1.00	40.44
17476	N	PHE	C	669	-84.473	-29.132	25.182	1.00	40.23
17477	CA	PHE	C	669	-84.150	-28.393	26.411	1.00	39.62
17478	CB	PHE	C	669	-84.467	-26.897	26.290	1.00	39.21
17479	CG	PHE	C	669	-83.445	-26.097	25.512	1.00	37.04
17480	CD1	PHE	C	669	-83.406	-26.150	24.136	1.00	34.24
17481	CE1	PHE	C	669	-82.488	-25.404	23.421	1.00	33.36
17482	CZ	PHE	C	669	-81.601	-24.571	24.080	1.00	33.94
17483	CE2	PHE	C	669	-81.641	-24.493	25.464	1.00	34.78

FIGURE 3 ME

A	B	C	D	E	F	G	H	I	J
17484	CD2	PHE	C	669	-82.558	-25.253	26.169	1.00	35.44
17485	C	PHE	C	669	-84.881	-28.965	27.617	1.00	40.05
17486	O	PHE	C	669	-84.696	-28.506	28.741	1.00	40.11
17487	N	LYS	C	670	-85.713	-29.970	27.382	1.00	40.60
17488	CA	LYS	C	670	-86.452	-30.631	28.450	1.00	41.14
17489	CB	LYS	C	670	-87.490	-31.589	27.861	1.00	41.62
17490	CG	LYS	C	670	-88.734	-30.912	27.277	1.00	43.99
17491	CD	LYS	C	670	-89.758	-31.942	26.814	1.00	46.81
17492	CE	LYS	C	670	-91.001	-31.283	26.206	1.00	48.27
17493	NZ	LYS	C	670	-91.853	-32.250	25.435	1.00	49.01
17494	C	LYS	C	670	-85.528	-31.419	29.376	1.00	41.34
17495	O	LYS	C	670	-85.868	-31.681	30.533	1.00	41.27
17496	N	GLN	C	671	-84.367	-31.817	28.871	1.00	41.18
17497	CA	GLN	C	671	-83.448	-32.589	29.693	1.00	41.40
17498	CB	GLN	C	671	-82.691	-33.620	28.855	1.00	42.05
17499	CG	GLN	C	671	-83.356	-34.066	27.565	1.00	44.40
17500	CD	GLN	C	671	-82.400	-34.873	26.710	1.00	47.75
17501	OE1	GLN	C	671	-82.691	-35.160	25.549	1.00	50.22
17502	NE2	GLN	C	671	-81.250	-35.242	27.284	1.00	48.69
17503	C	GLN	C	671	-82.412	-31.717	30.384	1.00	40.78
17504	O	GLN	C	671	-81.516	-32.236	31.045	1.00	41.50
17505	N	VAL	C	672	-82.495	-30.403	30.226	1.00	39.33
17506	CA	VAL	C	672	-81.478	-29.549	30.833	1.00	38.19
17507	CB	VAL	C	672	-80.542	-28.961	29.768	1.00	38.30
17508	CG1	VAL	C	672	-79.882	-30.075	28.934	1.00	36.38
17509	CG2	VAL	C	672	-81.313	-27.976	28.882	1.00	37.82
17510	C	VAL	C	672	-82.057	-28.387	31.620	1.00	37.37
17511	O	VAL	C	672	-83.206	-28.031	31.442	1.00	37.61
17512	N	GLU	C	673	-81.259	-27.822	32.518	1.00	36.29
17513	CA	GLU	C	673	-81.635	-26.591	33.205	1.00	35.13
17514	CB	GLU	C	673	-81.137	-26.602	34.641	1.00	35.55
17515	CG	GLU	C	673	-81.748	-27.713	35.474	1.00	40.14
17516	CD	GLU	C	673	-80.782	-28.223	36.524	1.00	44.05
17517	OE1	GLU	C	673	-80.411	-27.437	37.418	1.00	46.78
17518	OE2	GLU	C	673	-80.376	-29.399	36.443	1.00	46.49
17519	C	GLU	C	673	-80.975	-25.457	32.426	1.00	32.91
17520	O	GLU	C	673	-79.753	-25.409	32.315	1.00	32.53
17521	N	TYR	C	674	-81.795	-24.561	31.891	1.00	30.56
17522	CA	TYR	C	674	-81.354	-23.462	31.042	1.00	28.55
17523	CB	TYR	C	674	-82.203	-23.496	29.777	1.00	28.68
17524	CG	TYR	C	674	-81.799	-22.619	28.620	1.00	27.46
17525	CD1	TYR	C	674	-80.477	-22.501	28.220	1.00	27.52
17526	CE1	TYR	C	674	-80.129	-21.718	27.117	1.00	26.33
17527	CZ	TYR	C	674	-81.114	-21.069	26.404	1.00	25.65
17528	OH	TYR	C	674	-80.791	-20.293	25.309	1.00	26.32
17529	CE2	TYR	C	674	-82.423	-21.172	26.787	1.00	26.23
17530	CD2	TYR	C	674	-82.759	-21.945	27.887	1.00	28.21
17531	C	TYR	C	674	-81.584	-22.108	31.674	1.00	27.22
17532	O	TYR	C	674	-82.644	-21.855	32.225	1.00	26.63
17533	N	LEU	C	675	-80.598	-21.230	31.572	1.00	26.37
17534	CA	LEU	C	675	-80.766	-19.844	32.000	1.00	26.14

FIGURE 3 MF

A	B	C	D	E	F	G	H	I	J
17535	CB	LEU	C	675	-79.854	-19.479	33.176	1.00	25.90
17536	CG	LEU	C	675	-79.814	-18.010	33.651	1.00	25.75
17537	CD1	LEU	C	675	-81.192	-17.476	34.109	1.00	23.89
17538	CD2	LEU	C	675	-78.801	-17.849	34.762	1.00	23.32
17539	C	LEU	C	675	-80.516	-18.947	30.791	1.00	26.05
17540	O	LEU	C	675	-79.430	-18.948	30.224	1.00	25.78
17541	N	LEU	C	676	-81.551	-18.199	30.414	1.00	25.92
17542	CA	LEU	C	676	-81.547	-17.303	29.263	1.00	26.02
17543	CB	LEU	C	676	-82.843	-17.524	28.471	1.00	25.45
17544	CG	LEU	C	676	-82.988	-16.741	27.177	1.00	25.45
17545	CD1	LEU	C	676	-84.319	-17.043	26.501	1.00	24.33
17546	CD2	LEU	C	676	-81.837	-17.036	26.271	1.00	23.72
17547	C	LEU	C	676	-81.463	-15.830	29.705	1.00	26.01
17548	O	LEU	C	676	-82.329	-15.366	30.429	1.00	26.52
17549	N	ILE	C	677	-80.443	-15.091	29.267	1.00	25.95
17550	CA	ILE	C	677	-80.273	-13.703	29.732	1.00	25.55
17551	CB	ILE	C	677	-79.085	-13.584	30.744	1.00	25.04
17552	CG1	ILE	C	677	-79.263	-14.532	31.939	1.00	24.66
17553	CD1	ILE	C	677	-78.014	-14.600	32.855	1.00	21.13
17554	CG2	ILE	C	677	-78.936	-12.157	31.230	1.00	24.45
17555	C	ILE	C	677	-80.017	-12.749	28.576	1.00	25.74
17556	O	ILE	C	677	-79.213	-13.041	27.708	1.00	26.49
17557	N	HIS	C	678	-80.657	-11.587	28.587	1.00	25.43
17558	CA	HIS	C	678	-80.484	-10.653	27.490	1.00	25.10
17559	CB	HIS	C	678	-81.390	-11.077	26.329	1.00	24.83
17560	CG	HIS	C	678	-80.800	-10.815	24.981	1.00	25.90
17561	ND1	HIS	C	678	-80.685	-11.796	24.018	1.00	25.45
17562	CE1	HIS	C	678	-80.113	-11.291	22.943	1.00	25.72
17563	NE2	HIS	C	678	-79.859	-10.014	23.167	1.00	28.31
17564	CD2	HIS	C	678	-80.283	-9.689	24.436	1.00	26.49
17565	C	HIS	C	678	-80.835	-9.221	27.892	1.00	25.15
17566	O	HIS	C	678	-81.818	-8.990	28.623	1.00	24.65
17567	N	GLY	C	679	-80.041	-8.268	27.398	1.00	25.01
17568	CA	GLY	C	679	-80.289	-6.856	27.617	1.00	25.20
17569	C	GLY	C	679	-81.352	-6.436	26.628	1.00	25.68
17570	O	GLY	C	679	-81.296	-6.852	25.474	1.00	26.27
17571	N	THR	C	680	-82.322	-5.625	27.053	1.00	25.67
17572	CA	THR	C	680	-83.406	-5.219	26.152	1.00	25.30
17573	CB	THR	C	680	-84.598	-4.632	26.924	1.00	25.15
17574	OG1	THR	C	680	-84.156	-3.505	27.700	1.00	27.27
17575	CG2	THR	C	680	-85.109	-5.604	27.952	1.00	23.02
17576	C	THR	C	680	-82.964	-4.206	25.114	1.00	25.68
17577	O	THR	C	680	-83.602	-4.054	24.088	1.00	25.49
17578	N	ALA	C	681	-81.886	-3.493	25.396	1.00	26.40
17579	CA	ALA	C	681	-81.379	-2.484	24.475	1.00	26.65
17580	CB	ALA	C	681	-81.199	-1.160	25.181	1.00	26.53
17581	C	ALA	C	681	-80.078	-2.942	23.815	1.00	26.92
17582	O	ALA	C	681	-79.188	-2.152	23.521	1.00	26.88
17583	N	ASP	C	682	-79.979	-4.238	23.591	1.00	27.70
17584	CA	ASP	C	682	-78.839	-4.781	22.880	1.00	28.44
17585	CB	ASP	C	682	-78.769	-6.280	23.087	1.00	27.96

FIGURE 3 MG

A	B	C	D	E	F	G	H	I	J
17586	CG	ASP	C	682	-77.418	-6.859	22.733	1.00	29.07
17587	OD1	ASP	C	682	-77.059	-7.902	23.346	1.00	28.45
17588	OD2	ASP	C	682	-76.662	-6.367	21.855	1.00	28.76
17589	C	ASP	C	682	-78.996	-4.442	21.391	1.00	28.76
17590	O	ASP	C	682	-79.898	-4.943	20.696	1.00	28.70
17591	N	ASP	C	683	-78.110	-3.577	20.930	1.00	28.86
17592	CA	ASP	C	683	-78.116	-3.078	19.567	1.00	29.85
17593	CB	ASP	C	683	-77.472	-1.694	19.577	1.00	29.46
17594	CG	ASP	C	683	-76.040	-1.732	20.090	1.00	30.36
17595	OD1	ASP	C	683	-75.831	-1.561	21.316	1.00	30.25
17596	OD2	ASP	C	683	-75.057	-1.956	19.347	1.00	30.48
17597	C	ASP	C	683	-77.301	-3.976	18.652	1.00	30.02
17598	O	ASP	C	683	-77.297	-3.794	17.437	1.00	30.19
17599	N	ASN	C	684	-76.586	-4.923	19.249	1.00	30.21
17600	CA	ASN	C	684	-75.705	-5.821	18.516	1.00	30.64
17601	CB	ASN	C	684	-74.425	-6.048	19.310	1.00	31.17
17602	CG	ASN	C	684	-73.311	-6.646	18.486	1.00	30.89
17603	OD1	ASN	C	684	-72.141	-6.385	18.748	1.00	34.62
17604	ND2	ASN	C	684	-73.655	-7.450	17.504	1.00	28.71
17605	C	ASN	C	684	-76.449	-7.120	18.279	1.00	30.65
17606	O	ASN	C	684	-76.910	-7.377	17.168	1.00	31.03
17607	N	VAL	C	685	-76.561	-7.954	19.308	1.00	30.46
17608	CA	VAL	C	685	-77.431	-9.106	19.183	1.00	29.55
17609	CB	VAL	C	685	-76.821	-10.424	19.695	1.00	30.12
17610	CG1	VAL	C	685	-75.287	-10.408	19.554	1.00	28.95
17611	CG2	VAL	C	685	-77.222	-10.686	21.089	1.00	31.47
17612	C	VAL	C	685	-78.721	-8.703	19.869	1.00	29.67
17613	O	VAL	C	685	-78.827	-8.572	21.102	1.00	29.52
17614	N	HIS	C	686	-79.703	-8.459	19.019	1.00	29.13
17615	CA	HIS	C	686	-80.995	-7.959	19.423	1.00	28.34
17616	CB	HIS	C	686	-81.817	-7.666	18.168	1.00	27.30
17617	CG	HIS	C	686	-81.095	-6.768	17.212	1.00	26.65
17618	ND1	HIS	C	686	-81.297	-6.794	15.849	1.00	26.45
17619	CE1	HIS	C	686	-80.513	-5.902	15.269	1.00	24.28
17620	NE2	HIS	C	686	-79.800	-5.307	16.207	1.00	26.49
17621	CD2	HIS	C	686	-80.150	-5.828	17.430	1.00	26.11
17622	C	HIS	C	686	-81.720	-8.843	20.414	1.00	27.58
17623	O	HIS	C	686	-81.643	-10.053	20.341	1.00	28.29
17624	N	PHE	C	687	-82.400	-8.213	21.362	1.00	26.85
17625	CA	PHE	C	687	-83.188	-8.934	22.350	1.00	26.05
17626	CB	PHE	C	687	-83.982	-7.932	23.208	1.00	25.87
17627	CG	PHE	C	687	-84.810	-8.586	24.268	1.00	23.93
17628	CD1	PHE	C	687	-84.232	-8.972	25.468	1.00	23.35
17629	CE1	PHE	C	687	-84.968	-9.601	26.438	1.00	22.69
17630	CZ	PHE	C	687	-86.301	-9.861	26.217	1.00	24.49
17631	CE2	PHE	C	687	-86.892	-9.493	25.005	1.00	23.18
17632	CD2	PHE	C	687	-86.143	-8.860	24.045	1.00	20.96
17633	C	PHE	C	687	-84.124	-9.928	21.655	1.00	25.82
17634	O	PHE	C	687	-84.494	-10.967	22.208	1.00	25.58
17635	N	GLN	C	688	-84.510	-9.572	20.427	1.00	26.01
17636	CA	GLN	C	688	-85.330	-10.402	19.548	1.00	25.30

FIGURE 3 MH

A	B	C	D	E	F	G	H	I	J
17637	CB	GLN	C	688	-85.229	-9.846	18.120	1.00	25.52
17638	CG	GLN	C	688	-85.657	-10.801	16.992	1.00	25.68
17639	CD	GLN	C	688	-85.124	-10.356	15.619	1.00	28.02
17640	OE1	GLN	C	688	-83.984	-9.922	15.503	1.00	29.89
17641	NE2	GLN	C	688	-85.947	-10.472	14.593	1.00	27.05
17642	C	GLN	C	688	-84.852	-11.849	19.540	1.00	25.27
17643	O	GLN	C	688	-85.654	-12.780	19.593	1.00	24.54
17644	N	GLN	C	689	-83.536	-12.023	19.445	1.00	25.10
17645	CA	GLN	C	689	-82.945	-13.359	19.370	1.00	25.76
17646	CB	GLN	C	689	-81.419	-13.274	19.192	1.00	24.96
17647	CG	GLN	C	689	-81.019	-12.322	18.067	1.00	25.21
17648	CD	GLN	C	689	-80.000	-12.901	17.089	1.00	25.38
17649	OE1	GLN	C	689	-79.153	-12.171	16.570	1.00	27.69
17650	NE2	GLN	C	689	-80.099	-14.182	16.816	1.00	20.61
17651	C	GLN	C	689	-83.311	-14.251	20.559	1.00	26.02
17652	O	GLN	C	689	-83.661	-15.408	20.368	1.00	26.06
17653	N	SER	C	690	-83.217	-13.718	21.779	1.00	26.14
17654	CA	SER	C	690	-83.577	-14.484	22.962	1.00	26.18
17655	CB	SER	C	690	-82.993	-13.857	24.225	1.00	26.51
17656	OG	SER	C	690	-81.621	-14.170	24.368	1.00	28.14
17657	C	SER	C	690	-85.090	-14.513	23.085	1.00	26.21
17658	O	SER	C	690	-85.655	-15.447	23.665	1.00	26.92
17659	N	ALA	C	691	-85.750	-13.481	22.565	1.00	25.38
17660	CA	ALA	C	691	-87.203	-13.466	22.609	1.00	25.80
17661	CB	ALA	C	691	-87.771	-12.131	22.083	1.00	25.47
17662	C	ALA	C	691	-87.757	-14.626	21.794	1.00	26.13
17663	O	ALA	C	691	-88.828	-15.138	22.104	1.00	25.66
17664	N	GLN	C	692	-87.040	-15.014	20.737	1.00	26.50
17665	CA	GLN	C	692	-87.507	-16.121	19.890	1.00	27.59
17666	CB	GLN	C	692	-86.966	-16.053	18.447	1.00	27.83
17667	CG	GLN	C	692	-87.450	-14.848	17.606	1.00	28.11
17668	CD	GLN	C	692	-88.916	-14.910	17.205	1.00	29.70
17669	OE1	GLN	C	692	-89.616	-15.847	17.555	1.00	32.56
17670	NE2	GLN	C	692	-89.381	-13.900	16.452	1.00	30.95
17671	C	GLN	C	692	-87.158	-17.447	20.520	1.00	27.38
17672	O	GLN	C	692	-87.885	-18.403	20.354	1.00	27.47
17673	N	ILE	C	693	-86.053	-17.503	21.255	1.00	27.61
17674	CA	ILE	C	693	-85.713	-18.725	21.963	1.00	27.65
17675	CB	ILE	C	693	-84.362	-18.585	22.673	1.00	27.94
17676	CG1	ILE	C	693	-83.261	-18.320	21.663	1.00	28.29
17677	CD1	ILE	C	693	-81.881	-18.316	22.267	1.00	28.15
17678	CG2	ILE	C	693	-84.046	-19.841	23.471	1.00	27.85
17679	C	ILE	C	693	-86.795	-18.969	22.996	1.00	27.38
17680	O	ILE	C	693	-87.400	-20.036	23.049	1.00	27.53
17681	N	SER	C	694	-87.078	-17.954	23.804	1.00	27.00
17682	CA	SER	C	694	-88.065	-18.136	24.858	1.00	26.27
17683	CB	SER	C	694	-88.193	-16.873	25.705	1.00	26.31
17684	OG	SER	C	694	-88.964	-15.889	25.035	1.00	26.46
17685	C	SER	C	694	-89.419	-18.542	24.273	1.00	25.86
17686	O	SER	C	694	-90.097	-19.421	24.806	1.00	24.83
17687	N	LYS	C	695	-89.825	-17.897	23.185	1.00	25.80

FIGURE 3 MI

A	B	C	D	E	F	G	H	I	J
17688	CA	LYS	C	695	-91.109	-18.256	22.587	1.00	26.44
17689	CB	LYS	C	695	-91.500	-17.304	21.459	1.00	25.78
17690	CG	LYS	C	695	-92.907	-17.555	20.937	1.00	25.78
17691	CD	LYS	C	695	-93.483	-16.335	20.241	1.00	24.53
17692	CE	LYS	C	695	-92.450	-15.682	19.306	1.00	26.21
17693	NZ	LYS	C	695	-92.287	-16.427	18.002	1.00	26.98
17694	C	LYS	C	695	-91.083	-19.721	22.121	1.00	27.05
17695	O	LYS	C	695	-91.994	-20.476	22.388	1.00	26.52
17696	N	ALA	C	696	-90.006	-20.126	21.462	1.00	28.36
17697	CA	ALA	C	696	-89.865	-21.514	21.061	1.00	29.59
17698	CB	ALA	C	696	-88.533	-21.722	20.366	1.00	29.41
17699	C	ALA	C	696	-90.000	-22.472	22.255	1.00	30.35
17700	O	ALA	C	696	-90.708	-23.468	22.181	1.00	31.17
17701	N	LEU	C	697	-89.337	-22.165	23.362	1.00	30.96
17702	CA	LEU	C	697	-89.378	-23.047	24.526	1.00	31.34
17703	CB	LEU	C	697	-88.329	-22.621	25.552	1.00	31.32
17704	CG	LEU	C	697	-86.858	-22.719	25.121	1.00	31.13
17705	CD1	LEU	C	697	-85.926	-22.158	26.197	1.00	31.53
17706	CD2	LEU	C	697	-86.500	-24.153	24.871	1.00	31.83
17707	C	LEU	C	697	-90.767	-23.139	25.167	1.00	31.83
17708	O	LEU	C	697	-91.170	-24.196	25.664	1.00	31.72
17709	N	VAL	C	698	-91.498	-22.030	25.164	1.00	32.33
17710	CA	VAL	C	698	-92.842	-22.016	25.718	1.00	32.77
17711	CB	VAL	C	698	-93.420	-20.600	25.686	1.00	32.93
17712	CG1	VAL	C	698	-94.941	-20.627	25.869	1.00	31.70
17713	CG2	VAL	C	698	-92.732	-19.714	26.746	1.00	33.84
17714	C	VAL	C	698	-93.731	-22.908	24.858	1.00	33.39
17715	O	VAL	C	698	-94.497	-23.747	25.354	1.00	32.98
17716	N	ASP	C	699	-93.612	-22.709	23.553	1.00	33.72
17717	CA	ASP	C	699	-94.399	-23.454	22.596	1.00	34.90
17718	CB	ASP	C	699	-94.157	-22.922	21.178	1.00	34.75
17719	CG	ASP	C	699	-94.846	-21.577	20.955	1.00	35.90
17720	OD1	ASP	C	699	-94.559	-20.876	19.952	1.00	35.34
17721	OD2	ASP	C	699	-95.703	-21.144	21.765	1.00	36.30
17722	C	ASP	C	699	-94.241	-24.976	22.715	1.00	35.14
17723	O	ASP	C	699	-95.145	-25.710	22.348	1.00	35.87
17724	N	VAL	C	700	-93.126	-25.456	23.263	1.00	35.25
17725	CA	VAL	C	700	-92.996	-26.895	23.462	1.00	35.16
17726	CB	VAL	C	700	-91.711	-27.475	22.851	1.00	35.42
17727	CG1	VAL	C	700	-91.681	-27.247	21.332	1.00	35.45
17728	CG2	VAL	C	700	-90.500	-26.889	23.517	1.00	35.54
17729	C	VAL	C	700	-93.087	-27.310	24.922	1.00	34.88
17730	O	VAL	C	700	-92.844	-28.472	25.253	1.00	35.23
17731	N	GLY	C	701	-93.427	-26.369	25.797	1.00	34.29
17732	CA	GLY	C	701	-93.599	-26.667	27.209	1.00	33.43
17733	C	GLY	C	701	-92.340	-26.962	28.011	1.00	33.58
17734	O	GLY	C	701	-92.350	-27.800	28.909	1.00	33.64
17735	N	VAL	C	702	-91.239	-26.285	27.719	1.00	33.38
17736	CA	VAL	C	702	-90.047	-26.548	28.504	1.00	33.15
17737	CB	VAL	C	702	-88.798	-26.788	27.635	1.00	33.65
17738	CG1	VAL	C	702	-88.959	-26.133	26.305	1.00	33.89



FIGURE 3 MJ

A	B	C	D	E	F	G	H	I	J
17739	CG2	VAL	C	702	-87.524	-26.329	28.350	1.00	32.46
17740	C	VAL	C	702	-89.804	-25.426	29.455	1.00	32.77
17741	O	VAL	C	702	-89.693	-24.278	29.047	1.00	33.10
17742	N	ASP	C	703	-89.769	-25.758	30.735	1.00	32.24
17743	CA	ASP	C	703	-89.481	-24.775	31.743	1.00	31.92
17744	CB	ASP	C	703	-89.839	-25.293	33.128	1.00	32.34
17745	CG	ASP	C	703	-89.866	-24.176	34.157	1.00	33.18
17746	OD1	ASP	C	703	-89.185	-24.287	35.188	1.00	35.21
17747	OD2	ASP	C	703	-90.527	-23.137	33.996	1.00	32.34
17748	C	ASP	C	703	-88.003	-24.443	31.699	1.00	31.72
17749	O	ASP	C	703	-87.171	-25.328	31.441	1.00	31.69
17750	N	PHE	C	704	-87.686	-23.180	31.977	1.00	30.47
17751	CA	PHE	C	704	-86.319	-22.671	31.956	1.00	29.79
17752	CB	PHE	C	704	-85.893	-22.354	30.526	1.00	29.50
17753	CG	PHE	C	704	-86.694	-21.234	29.895	1.00	29.13
17754	CD1	PHE	C	704	-86.176	-19.959	29.809	1.00	28.22
17755	CE1	PHE	C	704	-86.924	-18.908	29.241	1.00	29.08
17756	CZ	PHE	C	704	-88.201	-19.140	28.772	1.00	28.41
17757	CE2	PHE	C	704	-88.733	-20.426	28.854	1.00	29.66
17758	CD2	PHE	C	704	-87.980	-21.460	29.425	1.00	29.03
17759	C	PHE	C	704	-86.316	-21.374	32.767	1.00	30.00
17760	O	PHE	C	704	-87.365	-20.923	33.225	1.00	30.00
17761	N	GLN	C	705	-85.151	-20.765	32.942	1.00	29.66
17762	CA	GLN	C	705	-85.083	-19.532	33.706	1.00	30.04
17763	CB	GLN	C	705	-84.028	-19.633	34.797	1.00	30.23
17764	CG	GLN	C	705	-84.073	-20.898	35.599	1.00	33.52
17765	CD	GLN	C	705	-85.252	-20.943	36.513	1.00	38.13
17766	OE1	GLN	C	705	-85.556	-19.950	37.174	1.00	41.13
17767	NE2	GLN	C	705	-85.929	-22.095	36.569	1.00	39.09
17768	C	GLN	C	705	-84.693	-18.412	32.780	1.00	29.39
17769	O	GLN	C	705	-83.908	-18.613	31.857	1.00	29.61
17770	N	ALA	C	706	-85.225	-17.223	33.040	1.00	28.88
17771	CA	ALA	C	706	-84.885	-16.062	32.231	1.00	27.87
17772	CB	ALA	C	706	-86.051	-15.688	31.325	1.00	27.66
17773	C	ALA	C	706	-84.516	-14.877	33.085	1.00	26.99
17774	O	ALA	C	706	-84.879	-14.800	34.252	1.00	27.04
17775	N	MET	C	707	-83.794	-13.947	32.480	1.00	26.11
17776	CA	MET	C	707	-83.530	-12.656	33.099	1.00	25.44
17777	CB	MET	C	707	-82.276	-12.693	33.961	1.00	25.00
17778	CG	MET	C	707	-81.984	-11.399	34.675	1.00	25.79
17779	SD	MET	C	707	-83.350	-10.765	35.649	1.00	26.16
17780	CE	MET	C	707	-83.436	-11.896	37.012	1.00	26.20
17781	C	MET	C	707	-83.356	-11.674	31.960	1.00	24.58
17782	O	MET	C	707	-82.564	-11.919	31.055	1.00	25.30
17783	N	TRP	C	708	-84.147	-10.613	31.948	1.00	23.19
17784	CA	TRP	C	708	-83.934	-9.580	30.966	1.00	22.70
17785	CB	TRP	C	708	-85.261	-9.058	30.368	1.00	22.20
17786	CG	TRP	C	708	-86.096	-8.244	31.314	1.00	21.68
17787	CD1	TRP	C	708	-85.885	-6.947	31.694	1.00	22.05
17788	NE1	TRP	C	708	-86.843	-6.559	32.600	1.00	21.32
17789	CE2	TRP	C	708	-87.702	-7.605	32.814	1.00	21.26

FIGURE 3 MK

A	B	C	D	E	F	G	H	I	J
17790	CD2	TRP	C	708	-87.268	-8.676	32.021	1.00	21.80
17791	CE3	TRP	C	708	-87.985	-9.882	32.081	1.00	22.63
17792	CZ3	TRP	C	708	-89.088	-9.965	32.904	1.00	20.42
17793	CH2	TRP	C	708	-89.503	-8.880	33.651	1.00	21.01
17794	CZ2	TRP	C	708	-88.829	-7.687	33.617	1.00	21.36
17795	C	TRP	C	708	-83.229	-8.493	31.750	1.00	22.73
17796	O	TRP	C	708	-83.390	-8.421	32.977	1.00	22.31
17797	N	TYR	C	709	-82.421	-7.687	31.074	1.00	22.44
17798	CA	TYR	C	709	-81.810	-6.522	31.729	1.00	23.23
17799	CB	TYR	C	709	-80.284	-6.642	31.842	1.00	22.71
17800	CG	TYR	C	709	-79.877	-7.542	33.000	1.00	23.98
17801	CD1	TYR	C	709	-79.779	-7.046	34.305	1.00	24.20
17802	CE1	TYR	C	709	-79.423	-7.880	35.368	1.00	23.62
17803	CZ	TYR	C	709	-79.190	-9.216	35.126	1.00	24.37
17804	OH	TYR	C	709	-78.840	-10.061	36.143	1.00	25.39
17805	CE2	TYR	C	709	-79.279	-9.717	33.851	1.00	24.05
17806	CD2	TYR	C	709	-79.628	-8.885	32.800	1.00	23.27
17807	C	TYR	C	709	-82.261	-5.221	31.061	1.00	23.07
17808	O	TYR	C	709	-81.802	-4.854	29.972	1.00	23.48
17809	N	THR	C	710	-83.185	-4.543	31.713	1.00	23.18
17810	CA	THR	C	710	-83.740	-3.310	31.172	1.00	23.50
17811	CB	THR	C	710	-84.575	-2.617	32.218	1.00	23.16
17812	CG1	THR	C	710	-85.625	-3.490	32.656	1.00	22.78
17813	CG2	THR	C	710	-85.289	-1.428	31.594	1.00	22.97
17814	C	THR	C	710	-82.662	-2.325	30.732	1.00	24.18
17815	O	THR	C	710	-81.822	-1.929	31.543	1.00	23.64
17816	N	ASP	C	711	-82.702	-1.941	29.452	1.00	24.46
17817	CA	ASP	C	711	-81.825	-0.904	28.903	1.00	24.95
17818	CB	ASP	C	711	-82.046	0.427	29.611	1.00	25.38
17819	CG	ASP	C	711	-83.420	1.020	29.321	1.00	25.45
17820	OD1	ASP	C	711	-83.787	2.039	29.948	1.00	25.43
17821	OD2	ASP	C	711	-84.191	0.526	28.481	1.00	24.04
17822	C	ASP	C	711	-80.334	-1.209	28.849	1.00	25.77
17823	O	ASP	C	711	-79.517	-0.303	28.624	1.00	25.57
17824	N	GLU	C	712	-79.963	-2.466	29.077	1.00	26.14
17825	CA	GLU	C	712	-78.567	-2.830	28.956	1.00	26.35
17826	CB	GLU	C	712	-78.214	-3.959	29.921	1.00	26.53
17827	CG	GLU	C	712	-78.190	-3.542	31.385	1.00	27.05
17828	CD	GLU	C	712	-77.122	-2.507	31.678	1.00	27.01
17829	OB1	GLU	C	712	-77.472	-1.366	32.024	1.00	28.43
17830	OB2	GLU	C	712	-75.928	-2.824	31.546	1.00	28.74
17831	C	GLU	C	712	-78.309	-3.256	27.512	1.00	26.60
17832	O	GLU	C	712	-79.199	-3.769	26.852	1.00	26.39
17833	N	ASP	C	713	-77.097	-3.011	27.022	1.00	27.38
17834	CA	ASP	C	713	-76.722	-3.453	25.697	1.00	27.89
17835	CB	ASP	C	713	-75.939	-2.383	24.925	1.00	27.56
17836	CG	ASP	C	713	-74.608	-2.075	25.537	1.00	29.75
17837	OD1	ASP	C	713	-74.141	-0.940	25.322	1.00	30.11
17838	OD2	ASP	C	713	-73.951	-2.892	26.239	1.00	31.92
17839	C	ASP	C	713	-75.958	-4.768	25.788	1.00	28.33
17840	O	ASP	C	713	-75.948	-5.418	26.828	1.00	28.12

FIGURE 3 ML

A	B	C	D	E	F	G	H	I	J
17841	N	HIS	C	714	-75.318	-5.146	24.689	1.00	28.83
17842	CA	HIS	C	714	-74.668	-6.444	24.576	1.00	28.96
17843	CB	HIS	C	714	-74.001	-6.578	23.222	1.00	28.89
17844	CG	HIS	C	714	-73.825	-7.994	22.791	1.00	29.25
17845	ND1	HIS	C	714	-74.833	-8.923	22.886	1.00	28.93
17846	CE1	HIS	C	714	-74.395	-10.089	22.445	1.00	30.34
17847	NE2	HIS	C	714	-73.142	-9.943	22.054	1.00	29.84
17848	CD2	HIS	C	714	-72.756	-8.645	22.275	1.00	29.24
17849	C	HIS	C	714	-73.656	-6.746	25.653	1.00	28.97
17850	O	HIS	C	714	-73.418	-7.907	25.980	1.00	28.89
17851	N	GLY	C	715	-73.041	-5.702	26.189	1.00	29.24
17852	CA	GLY	C	715	-72.060	-5.883	27.236	1.00	29.03
17853	C	GLY	C	715	-72.655	-6.055	28.631	1.00	28.99
17854	O	GLY	C	715	-71.976	-6.593	29.506	1.00	29.44
17855	N	ILE	C	716	-73.906	-5.627	28.832	1.00	28.74
17856	CA	ILE	C	716	-74.546	-5.643	30.150	1.00	28.60
17857	CB	ILE	C	716	-75.097	-7.061	30.482	1.00	28.61
17858	CG1	ILE	C	716	-76.012	-7.553	29.352	1.00	27.50
17859	CD1	ILE	C	716	-76.567	-8.976	29.526	1.00	24.05
17860	CG2	ILE	C	716	-75.850	-7.081	31.828	1.00	27.56
17861	C	ILE	C	716	-73.488	-5.180	31.155	1.00	29.55
17862	O	ILE	C	716	-73.229	-5.844	32.162	1.00	29.67
17863	N	ALA	C	717	-72.888	-4.028	30.859	1.00	30.13
17864	CA	ALA	C	717	-71.721	-3.519	31.579	1.00	30.84
17865	CB	ALA	C	717	-70.617	-3.146	30.601	1.00	32.01
17866	C	ALA	C	717	-71.929	-2.365	32.515	1.00	31.09
17867	O	ALA	C	717	-70.972	-1.892	33.079	1.00	30.83
17868	N	SER	C	718	-73.148	-1.867	32.655	1.00	31.83
17869	CA	SER	C	718	-73.378	-0.873	33.679	1.00	32.40
17870	CB	SER	C	718	-74.872	-0.600	33.812	1.00	32.62
17871	OG	SER	C	718	-75.432	-0.369	32.525	1.00	36.75
17872	C	SER	C	718	-72.862	-1.516	34.967	1.00	32.11
17873	O	SER	C	718	-72.781	-2.734	35.070	1.00	32.36
17874	N	SER	C	719	-72.544	-0.697	35.953	1.00	31.52
17875	CA	SER	C	719	-72.051	-1.187	37.220	1.00	31.73
17876	CB	SER	C	719	-71.735	-0.003	38.137	1.00	31.98
17877	OG	SER	C	719	-70.603	-0.283	38.913	1.00	33.29
17878	C	SER	C	719	-73.044	-2.107	37.920	1.00	30.80
17879	O	SER	C	719	-72.718	-3.211	38.321	1.00	30.97
17880	N	THR	C	720	-74.268	-1.647	38.072	1.00	30.15
17881	CA	THR	C	720	-75.241	-2.431	38.805	1.00	29.08
17882	CB	THR	C	720	-76.425	-1.559	39.178	1.00	28.68
17883	OG1	THR	C	720	-76.876	-0.883	38.011	1.00	29.40
17884	CG2	THR	C	720	-75.951	-0.421	40.044	1.00	28.86
17885	C	THR	C	720	-75.682	-3.669	38.048	1.00	28.58
17886	O	THR	C	720	-75.903	-4.717	38.656	1.00	28.42
17887	N	ALA	C	721	-75.796	-3.576	36.728	1.00	27.86
17888	CA	ALA	C	721	-76.220	-4.752	35.969	1.00	27.51
17889	CB	ALA	C	721	-76.701	-4.383	34.573	1.00	26.20
17890	C	ALA	C	721	-75.134	-5.826	35.929	1.00	27.48
17891	O	ALA	C	721	-75.423	-7.014	36.031	1.00	27.71

FIGURE 3 MM

A	B	C	D	E	F	G	H	I	J
17892	N	HIS	C	722	-73.884	-5.399	35.804	1.00	27.93
17893	CA	HIS	C	722	-72.759	-6.323	35.762	1.00	28.17
17894	CB	HIS	C	722	-71.460	-5.543	35.564	1.00	28.11
17895	CG	HIS	C	722	-70.221	-6.339	35.837	1.00	27.63
17896	ND1	HIS	C	722	-69.750	-7.304	34.975	1.00	28.33
17897	CE1	HIS	C	722	-68.646	-7.830	35.471	1.00	28.63
17898	NE2	HIS	C	722	-68.389	-7.247	36.628	1.00	26.63
17899	CD2	HIS	C	722	-69.354	-6.306	36.875	1.00	26.02
17900	C	HIS	C	722	-72.701	-7.128	37.058	1.00	28.52
17901	O	HIS	C	722	-72.442	-8.324	37.050	1.00	29.60
17902	N	GLN	C	723	-72.954	-6.470	38.176	1.00	28.29
17903	CA	GLN	C	723	-72.929	-7.149	39.455	1.00	27.90
17904	CB	GLN	C	723	-72.910	-6.117	40.584	1.00	28.20
17905	CG	GLN	C	723	-71.681	-5.219	40.515	1.00	29.47
17906	CD	GLN	C	723	-71.570	-4.211	41.657	1.00	31.92
17907	OE1	GLN	C	723	-71.558	-4.583	42.829	1.00	35.27
17908	NE2	GLN	C	723	-71.454	-2.941	41.309	1.00	31.36
17909	C	GLN	C	723	-74.119	-8.113	39.556	1.00	27.19
17910	O	GLN	C	723	-73.969	-9.253	39.991	1.00	26.28
17911	N	HIS	C	724	-75.283	-7.651	39.110	1.00	26.35
17912	CA	HIS	C	724	-76.505	-8.445	39.140	1.00	25.52
17913	CB	HIS	C	724	-77.701	-7.599	38.709	1.00	25.20
17914	CG	HIS	C	724	-79.023	-8.157	39.137	1.00	22.05
17915	ND1	HIS	C	724	-79.711	-9.096	38.397	1.00	20.91
17916	CE1	HIS	C	724	-80.844	-9.392	39.008	1.00	19.99
17917	NE2	HIS	C	724	-80.909	-8.687	40.127	1.00	20.84
17918	CD2	HIS	C	724	-79.781	-7.910	40.230	1.00	19.60
17919	C	HIS	C	724	-76.461	-9.691	38.265	1.00	26.07
17920	O	HIS	C	724	-76.941	-10.749	38.656	1.00	26.47
17921	N	ILE	C	725	-75.896	-9.582	37.073	1.00	26.44
17922	CA	ILE	C	725	-75.903	-10.737	36.192	1.00	25.82
17923	CB	ILE	C	725	-75.534	-10.358	34.755	1.00	25.39
17924	CG1	ILE	C	725	-75.616	-11.601	33.850	1.00	24.74
17925	CD1	ILE	C	725	-75.653	-11.305	32.353	1.00	19.42
17926	CG2	ILE	C	725	-74.155	-9.741	34.712	1.00	25.19
17927	C	ILE	C	725	-74.976	-11.805	36.733	1.00	25.91
17928	O	ILE	C	725	-75.273	-12.998	36.669	1.00	26.39
17929	N	TYR	C	726	-73.839	-11.385	37.258	1.00	26.22
17930	CA	TYR	C	726	-72.905	-12.356	37.820	1.00	26.09
17931	CB	TYR	C	726	-71.484	-11.788	37.888	1.00	25.95
17932	CG	TYR	C	726	-70.842	-11.862	36.538	1.00	25.39
17933	CD1	TYR	C	726	-70.768	-10.742	35.727	1.00	26.52
17934	CE1	TYR	C	726	-70.207	-10.807	34.470	1.00	26.04
17935	CZ	TYR	C	726	-69.732	-12.019	34.000	1.00	27.86
17936	OH	TYR	C	726	-69.183	-12.076	32.736	1.00	31.21
17937	CE2	TYR	C	726	-69.800	-13.155	34.785	1.00	25.02
17938	CD2	TYR	C	726	-70.376	-13.074	36.038	1.00	25.01
17939	C	TYR	C	726	-73.389	-12.933	39.142	1.00	25.98
17940	O	TYR	C	726	-73.091	-14.079	39.473	1.00	25.65
17941	N	THR	C	727	-74.152	-12.151	39.893	1.00	26.17
17942	CA	THR	C	727	-74.722	-12.673	41.113	1.00	26.92

FIGURE 3 MN

A	B	C	D	E	F	G	H	I	J
17943	CB	THR	C	727	-75.344	-11.554	41.938	1.00	27.07
17944	OE1	THR	C	727	-74.316	-10.635	42.327	1.00	28.30
17945	CG2	THR	C	727	-75.834	-12.089	43.262	1.00	26.08
17946	C	THR	C	727	-75.787	-13.696	40.743	1.00	26.93
17947	O	THR	C	727	-75.851	-14.775	41.292	1.00	27.40
17948	N	HIS	C	728	-76.612	-13.343	39.773	1.00	27.18
17949	CA	HIS	C	728	-77.702	-14.192	39.376	1.00	26.26
17950	CB	HIS	C	728	-78.578	-13.490	38.344	1.00	26.06
17951	CG	HIS	C	728	-79.934	-14.097	38.205	1.00	23.30
17952	ND1	HIS	C	728	-80.849	-14.101	39.232	1.00	22.47
17953	CE1	HIS	C	728	-81.948	-14.716	38.836	1.00	25.26
17954	NE2	HIS	C	728	-81.779	-15.106	37.584	1.00	23.59
17955	CD2	HIS	C	728	-80.517	-14.752	37.177	1.00	23.11
17956	C	HIS	C	728	-77.207	-15.494	38.822	1.00	26.77
17957	O	HIS	C	728	-77.769	-16.540	39.132	1.00	27.34
17958	N	MET	C	729	-76.175	-15.437	37.988	1.00	27.12
17959	CA	MET	C	729	-75.628	-16.642	37.365	1.00	27.80
17960	CB	MET	C	729	-74.648	-16.286	36.234	1.00	27.69
17961	CG	MET	C	729	-75.263	-15.546	35.049	1.00	28.59
17962	SD	MET	C	729	-74.201	-15.459	33.591	1.00	30.95
17963	CE	MET	C	729	-72.729	-14.769	34.257	1.00	29.21
17964	C	MET	C	729	-74.908	-17.520	38.397	1.00	28.32
17965	O	MET	C	729	-74.869	-18.747	38.253	1.00	28.43
17966	N	SER	C	730	-74.314	-16.888	39.405	1.00	28.25
17967	CA	SER	C	730	-73.630	-17.619	40.453	1.00	29.48
17968	CB	SER	C	730	-72.883	-16.676	41.394	1.00	29.23
17969	OG	SER	C	730	-71.845	-16.002	40.707	1.00	30.09
17970	C	SER	C	730	-74.662	-18.420	41.226	1.00	29.98
17971	O	SER	C	730	-74.448	-19.586	41.524	1.00	29.82
17972	N	HIS	C	731	-75.798	-17.806	41.529	1.00	30.81
17973	CA	HIS	C	731	-76.848	-18.559	42.211	1.00	32.19
17974	CB	HIS	C	731	-78.043	-17.671	42.564	1.00	32.39
17975	CG	HIS	C	731	-77.797	-16.752	43.720	1.00	34.04
17976	ND1	HIS	C	731	-78.328	-15.476	43.789	1.00	35.75
17977	CE1	HIS	C	731	-77.952	-14.905	44.921	1.00	34.64
17978	NE2	HIS	C	731	-77.207	-15.768	45.593	1.00	35.49
17979	CD2	HIS	C	731	-77.092	-16.927	44.862	1.00	34.24
17980	C	HIS	C	731	-77.299	-19.740	41.346	1.00	32.33
17981	O	HIS	C	731	-77.464	-20.857	41.831	1.00	31.91
17982	N	PHE	C	732	-77.467	-19.499	40.053	1.00	32.72
17983	CA	PHE	C	732	-77.942	-20.559	39.177	1.00	33.08
17984	CB	PHE	C	732	-78.275	-20.011	37.789	1.00	32.39
17985	CG	PHE	C	732	-78.750	-21.053	36.823	1.00	30.50
17986	CD1	PHE	C	732	-80.094	-21.375	36.739	1.00	29.46
17987	CE1	PHE	C	732	-80.546	-22.336	35.850	1.00	30.06
17988	CZ	PHE	C	732	-79.639	-22.993	35.019	1.00	30.53
17989	CE2	PHE	C	732	-78.291	-22.675	35.092	1.00	29.92
17990	CD2	PHE	C	732	-77.858	-21.701	35.998	1.00	29.63
17991	C	PHE	C	732	-76.959	-21.743	39.100	1.00	33.93
17992	O	PHE	C	732	-77.356	-22.888	39.250	1.00	34.04
17993	N	ILE	C	733	-75.687	-21.469	38.863	1.00	35.09

FIGURE 3 MO

A	B	C	D	E	F	G	H	I	J
17994	CA	ILE	C	733	-74.708	-22.541	38.781	1.00	36.47
17995	CB	ILE	C	733	-73.334	-21.993	38.433	1.00	36.03
17996	CG1	ILE	C	733	-73.352	-21.375	37.038	1.00	36.78
17997	CD1	ILE	C	733	-73.673	-22.355	35.938	1.00	37.16
17998	CG2	ILE	C	733	-72.312	-23.105	38.511	1.00	36.12
17999	C	ILE	C	733	-74.618	-23.311	40.094	1.00	37.68
18000	O	ILE	C	733	-74.568	-24.539	40.097	1.00	37.96
18001	N	LYS	C	734	-74.614	-22.589	41.209	1.00	39.05
18002	CA	LYS	C	734	-74.487	-23.239	42.512	1.00	40.56
18003	CB	LYS	C	734	-74.345	-22.199	43.625	1.00	40.35
18004	CG	LYS	C	734	-73.340	-21.120	43.293	1.00	39.62
18005	CD	LYS	C	734	-72.498	-20.779	44.472	1.00	39.88
18006	CE	LYS	C	734	-73.333	-20.568	45.699	1.00	40.60
18007	NZ	LYS	C	734	-72.622	-21.094	46.881	1.00	41.45
18008	C	LYS	C	734	-75.613	-24.209	42.840	1.00	41.64
18009	O	LYS	C	734	-75.367	-25.308	43.330	1.00	42.54
18010	N	GLN	C	735	-76.846	-23.808	42.588	1.00	42.61
18011	CA	GLN	C	735	-77.975	-24.673	42.885	1.00	43.80
18012	CB	GLN	C	735	-79.298	-23.889	42.813	1.00	43.93
18013	CG	GLN	C	735	-80.478	-24.618	43.486	1.00	46.68
18014	CD	GLN	C	735	-81.636	-23.693	43.845	1.00	49.78
18015	OE1	GLN	C	735	-82.014	-23.587	45.020	1.00	50.01
18016	NE2	GLN	C	735	-82.210	-23.033	42.834	1.00	50.27
18017	C	GLN	C	735	-77.997	-25.883	41.943	1.00	43.79
18018	O	GLN	C	735	-78.464	-26.960	42.307	1.00	43.94
18019	N	CYS	C	736	-77.496	-25.700	40.729	1.00	43.82
18020	CA	CYS	C	736	-77.455	-26.783	39.764	1.00	44.07
18021	CB	CYS	C	736	-77.213	-26.217	38.370	1.00	44.15
18022	SG	CYS	C	736	-76.430	-27.305	37.152	1.00	45.75
18023	C	CYS	C	736	-76.374	-27.790	40.155	1.00	44.17
18024	O	CYS	C	736	-76.455	-28.968	39.814	1.00	44.51
18025	N	PHE	C	737	-75.382	-27.311	40.897	1.00	43.85
18026	CA	PHE	C	737	-74.290	-28.127	41.378	1.00	43.48
18027	CB	PHE	C	737	-72.997	-27.358	41.219	1.00	43.04
18028	CG	PHE	C	737	-72.486	-27.348	39.836	1.00	40.98
18029	CD1	PHE	C	737	-73.101	-28.112	38.864	1.00	39.10
18030	CE1	PHE	C	737	-72.633	-28.121	37.592	1.00	37.35
18031	CZ	PHE	C	737	-71.532	-27.363	37.263	1.00	39.57
18032	CE2	PHE	C	737	-70.905	-26.598	38.223	1.00	38.73
18033	CD2	PHE	C	737	-71.387	-26.592	39.503	1.00	39.14
18034	C	PHE	C	737	-74.463	-28.459	42.848	1.00	44.22
18035	O	PHE	C	737	-73.541	-28.962	43.501	1.00	44.19
18036	N	SER	C	738	-75.639	-28.172	43.380	1.00	44.96
18037	CA	SER	C	738	-75.876	-28.410	44.792	1.00	45.92
18038	CB	SER	C	738	-75.921	-29.916	45.084	1.00	46.15
18039	OG	SER	C	738	-76.830	-30.586	44.219	1.00	44.65
18040	C	SER	C	738	-74.777	-27.751	45.627	1.00	47.06
18041	O	SER	C	738	-74.360	-28.307	46.648	1.00	47.75
18042	N	LEU	C	739	-74.289	-26.586	45.197	1.00	47.53
18043	CA	LEU	C	739	-73.290	-25.862	45.983	1.00	48.35
18044	CB	LEU	C	739	-72.264	-25.170	45.090	1.00	48.05

FIGURE 3 MP

A	B	C	D	E	F	G	H	I	J
18045	CG	LEU	C	739	-71.381	-26.056	44.218	1.00	47.85
18046	CD1	LEU	C	739	-70.391	-25.195	43.483	1.00	46.49
18047	CD2	LEU	C	739	-70.661	-27.136	45.048	1.00	48.24
18048	C	LEU	C	739	-73.953	-24.835	46.908	1.00	49.10
18049	O	LEU	C	739	-74.413	-23.778	46.458	1.00	49.35
18050	N	PRO	C	740	-73.984	-25.156	48.198	1.00	49.55
18051	CA	PRO	C	740	-74.608	-24.312	49.227	1.00	49.80
18052	CB	PRO	C	740	-74.296	-25.073	50.527	1.00	50.11
18053	CG	PRO	C	740	-74.110	-26.505	50.086	1.00	50.01
18054	CD	PRO	C	740	-73.399	-26.383	48.766	1.00	49.91
18055	C	PRO	C	740	-74.065	-22.873	49.312	1.00	49.76
18056	O	PRO	C	740	-72.926	-22.583	48.946	1.00	49.69
18057	O7	NAG	C1621		-69.324	24.781	23.484	1.00	77.15
18058	C7	NAG	C1621		-69.609	25.335	22.437	1.00	77.32
18059	C8	NAG	C1621		-68.637	25.427	21.299	1.00	77.63
18060	N2	NAG	C1621		-70.814	25.855	22.191	1.00	76.74
18061	C2	NAG	C1621		-71.897	25.849	23.162	1.00	76.77
18062	C1	NAG	C1621		-72.310	24.411	23.483	1.00	74.60
18063	C3	NAG	C1621		-71.539	26.601	24.442	1.00	77.28
18064	O3	NAG	C1621		-71.306	27.990	24.170	1.00	77.20
18065	C4	NAG	C1621		-72.695	26.489	25.427	1.00	78.05
18066	O4	NAG	C1621		-72.324	27.130	26.658	1.00	78.54
18067	C5	NAG	C1621		-73.094	25.023	25.647	1.00	77.85
18068	O5	NAG	C1621		-73.407	24.398	24.400	1.00	76.82
18069	C6	NAG	C1621		-74.296	24.902	26.587	1.00	78.69
18070	O6	NAG	C1621		-75.394	24.202	25.975	1.00	78.53
18071	O7	NAG	C2311		-45.119	20.326	4.123	1.00	86.50
18072	C7	NAG	C2311		-44.308	19.536	4.596	1.00	86.26
18073	C8	NAG	C2311		-43.692	19.775	5.943	1.00	86.73
18074	N2	NAG	C2311		-43.959	18.387	4.020	1.00	85.54
18075	C2	NAG	C2311		-44.431	17.941	2.719	1.00	85.11
18076	C1	NAG	C2311		-45.605	16.977	2.834	1.00	82.08
18077	C3	NAG	C2311		-44.838	19.103	1.819	1.00	85.85
18078	O3	NAG	C2311		-43.800	20.090	1.711	1.00	86.58
18079	C4	NAG	C2311		-45.187	18.534	0.452	1.00	86.28
18080	O4	NAG	C2311		-45.625	19.593	-0.408	1.00	86.86
18081	C5	NAG	C2311		-46.284	17.482	0.590	1.00	85.68
18082	O5	NAG	C2311		-45.899	16.472	1.529	1.00	84.80
18083	C6	NAG	C2311		-46.572	16.841	-0.763	1.00	86.43
18084	O6	NAG	C2311		-47.501	15.757	-0.613	1.00	86.77
18085	O7	NAG	C2411		-75.042	10.172	-2.240	1.00	55.28
18086	C7	NAG	C2411		-75.585	10.527	-1.211	1.00	55.28
18087	C8	NAG	C2411		-75.084	11.660	-0.359	1.00	55.62
18088	N2	NAG	C2411		-76.717	9.971	-0.818	1.00	55.77
18089	C2	NAG	C2411		-77.290	8.882	-1.569	1.00	55.90
18090	C1	NAG	C2411		-77.656	7.748	-0.640	1.00	54.04
18091	C3	NAG	C2411		-78.557	9.352	-2.254	1.00	58.50
18092	O3	NAG	C2411		-78.217	10.393	-3.177	1.00	60.48
18093	C4	NAG	C2411		-79.242	8.184	-2.960	1.00	57.98
18094	O4	NAG	C2411		-80.546	8.586	-3.368	1.00	61.94
18095	C5	NAG	C2411		-79.378	6.976	-2.034	1.00	57.21

FIGURE 3 MQ

A	B	C	D	E	F	G	H	I	J
18096	O5	NAG	C2411		-78.125	6.674	-1.437	1.00	54.85
18097	C6	NAG	C2411		-79.857	5.738	-2.785	1.00	57.15
18098	O6	NAG	C2411		-80.816	5.047	-1.985	1.00	57.43
18099	O7	NAG	C2412		-84.036	5.860	-2.398	1.00	72.47
18100	C7	NAG	C2412		-83.715	6.962	-2.822	1.00	73.43
18101	C8	NAG	C2412		-83.913	8.216	-2.018	1.00	72.70
18102	N2	NAG	C2412		-83.090	7.125	-3.991	1.00	73.75
18103	C2	NAG	C2412		-82.715	8.448	-4.452	1.00	74.18
18104	C1	NAG	C2412		-81.205	8.630	-4.581	1.00	71.93
18105	C3	NAG	C2412		-83.383	8.739	-5.788	1.00	75.49
18106	O3	NAG	C2412		-84.803	8.644	-5.651	1.00	75.59
18107	C4	NAG	C2412		-83.000	10.149	-6.210	1.00	76.52
18108	O4	NAG	C2412		-83.608	10.490	-7.457	1.00	80.35
18109	C5	NAG	C2412		-81.486	10.249	-6.315	1.00	75.48
18110	O5	NAG	C2412		-80.920	9.961	-5.032	1.00	73.95
18111	C6	NAG	C2412		-81.064	11.638	-6.789	1.00	75.01
18112	O6	NAG	C2412		-81.555	12.632	-5.880	1.00	74.46
18113	O6	MAN	C2413		-86.351	13.692	-8.034	1.00	93.60
18114	C6	MAN	C2413		-86.318	13.247	-9.396	1.00	92.70
18115	C5	MAN	C2413		-85.247	12.175	-9.548	1.00	91.67
18116	O5	MAN	C2413		-85.404	11.229	-8.490	1.00	90.56
18117	C4	MAN	C2413		-85.365	11.486	-10.905	1.00	91.36
18118	O4	MAN	C2413		-85.075	12.418	-11.949	1.00	92.46
18119	C3	MAN	C2413		-84.399	10.313	-11.010	1.00	90.86
18120	O3	MAN	C2413		-84.652	9.578	-12.211	1.00	91.25
18121	C2	MAN	C2413		-84.545	9.392	-9.811	1.00	90.25
18122	O2	MAN	C2413		-85.824	8.748	-9.848	1.00	89.98
18123	C1	MAN	C2413		-84.419	10.199	-8.528	1.00	88.38
18124	O6	MAN	C2414		-80.241	11.930	-11.940	1.00	99.01
18125	C6	MAN	C2414		-80.791	10.937	-12.810	1.00	98.42
18126	C5	MAN	C2414		-82.264	11.255	-13.029	1.00	97.98
18127	O5	MAN	C2414		-82.550	12.540	-12.479	1.00	97.59
18128	C4	MAN	C2414		-82.631	11.205	-14.509	1.00	97.88
18129	O4	MAN	C2414		-82.502	9.856	-14.966	1.00	97.78
18130	C3	MAN	C2414		-84.059	11.686	-14.745	1.00	97.54
18131	O3	MAN	C2414		-84.269	11.881	-16.144	1.00	97.99
18132	C2	MAN	C2414		-84.314	13.003	-14.031	1.00	97.34
18133	O2	MAN	C2414		-83.531	14.032	-14.649	1.00	97.01
18134	C1	MAN	C2414		-83.931	12.879	-12.564	1.00	96.30
18135	O7	NAG	C2931		-70.567	28.515	-2.283	1.00	81.63
18136	C7	NAG	C2931		-70.247	28.468	-1.106	1.00	80.91
18137	C8	NAG	C2931		-69.337	29.480	-0.477	1.00	81.17
18138	N2	NAG	C2931		-70.757	27.564	-0.280	1.00	79.93
18139	C2	NAG	C2931		-71.665	26.557	-0.785	1.00	79.07
18140	C1	NAG	C2931		-71.355	25.188	-0.191	1.00	77.34
18141	C3	NAG	C2931		-73.096	26.975	-0.471	1.00	79.10
18142	O3	NAG	C2931		-73.375	28.245	-1.078	1.00	79.59
18143	C4	NAG	C2931		-74.057	25.910	-0.984	1.00	79.26
18144	O4	NAG	C2931		-75.420	26.257	-0.675	1.00	79.01
18145	C5	NAG	C2931		-73.676	24.559	-0.376	1.00	78.61
18146	O5	NAG	C2931		-72.309	24.237	-0.674	1.00	78.29



FIGURE 3 MR

A	B	C	D	E	F	G	H	I	J
18147	C6	NAG	C2931		-74.600	23.456	-0.894	1.00	78.34
18148	O6	NAG	C2931		-74.017	22.784	-2.020	1.00	77.59
18149	O7	NAG	C3331		-63.689	-19.851	-4.727	1.00	74.43
18150	C7	NAG	C3331		-63.690	-18.636	-4.805	1.00	73.65
18151	C8	NAG	C3331		-62.493	-17.871	-5.291	1.00	74.34
18152	N2	NAG	C3331		-64.780	-17.909	-4.552	1.00	72.43
18153	C2	NAG	C3331		-66.007	-18.533	-4.085	1.00	70.84
18154	C1	NAG	C3331		-66.710	-17.632	-3.082	1.00	67.96
18155	C3	NAG	C3331		-66.970	-18.879	-5.213	1.00	70.62
18156	O3	NAG	C3331		-66.363	-19.827	-6.102	1.00	71.81
18157	C4	NAG	C3331		-68.250	-19.480	-4.633	1.00	70.09
18158	O4	NAG	C3331		-69.255	-19.587	-5.653	1.00	69.60
18159	C5	NAG	C3331		-68.788	-18.652	-3.465	1.00	69.57
18160	O5	NAG	C3331		-67.764	-18.390	-2.505	1.00	69.44
18161	C6	NAG	C3331		-69.918	-19.382	-2.753	1.00	69.16
18162	O6	NAG	C3331		-69.339	-20.318	-1.841	1.00	68.15
18163	N	SER	D 13		-110.740	-42.363	47.327	1.00	61.36
18164	CA	SER	D 13		-110.386	-40.918	47.415	1.00	60.89
18165	CB	SER	D 13		-111.292	-40.205	48.428	1.00	60.96
18166	OG	SER	D 13		-111.799	-38.984	47.896	1.00	60.88
18167	C	SER	D 13		-108.908	-40.766	47.785	1.00	60.77
18168	O	SER	D 13		-108.553	-40.477	48.951	1.00	60.94
18169	N	ARG	D 14		-108.048	-40.983	46.789	1.00	60.00
18170	CA	ARG	D 14		-106.597	-40.869	46.975	1.00	59.08
18171	CB	ARG	D 14		-105.977	-42.260	47.149	1.00	59.38
18172	CG	ARG	D 14		-104.493	-42.396	46.898	1.00	60.79
18173	CD	ARG	D 14		-104.176	-43.165	45.625	1.00	64.29
18174	NE	ARG	D 14		-103.070	-44.107	45.797	1.00	66.91
18175	CZ	ARG	D 14		-101.994	-44.143	45.018	1.00	67.92
18176	NH1	ARG	D 14		-101.871	-43.288	44.013	1.00	67.83
18177	NH2	ARG	D 14		-101.039	-45.034	45.240	1.00	68.22
18178	C	ARG	D 14		-105.942	-40.037	45.857	1.00	57.85
18179	O	ARG	D 14		-104.736	-39.753	45.891	1.00	57.68
18180	N	LYS	D 15		-106.753	-39.639	44.878	1.00	56.24
18181	CA	LYS	D 15		-106.303	-38.729	43.833	1.00	54.85
18182	CB	LYS	D 15		-107.112	-38.919	42.556	1.00	55.33
18183	CG	LYS	D 15		-106.495	-39.829	41.516	1.00	56.61
18184	CD	LYS	D 15		-107.496	-40.065	40.380	1.00	58.88
18185	CE	LYS	D 15		-108.832	-40.572	40.922	1.00	59.93
18186	NZ	LYS	D 15		-109.924	-40.572	39.890	1.00	61.34
18187	C	LYS	D 15		-106.508	-37.296	44.300	1.00	53.25
18188	O	LYS	D 15		-107.446	-37.009	45.041	1.00	53.26
18189	N	THR	D 16		-105.625	-36.401	43.878	1.00	51.06
18190	CA	THR	D 16		-105.809	-34.980	44.147	1.00	48.79
18191	CB	THR	D 16		-104.599	-34.376	44.883	1.00	48.98
18192	OG1	THR	D 16		-103.392	-34.665	44.159	1.00	48.23
18193	CG2	THR	D 16		-104.384	-35.058	46.233	1.00	49.02
18194	C	THR	D 16		-105.968	-34.292	42.811	1.00	47.23
18195	O	THR	D 16		-105.633	-34.853	41.775	1.00	46.86
18196	N	TYR	D 17		-106.504	-33.082	42.834	1.00	45.40
18197	CA	TYR	D 17		-106.595	-32.276	41.634	1.00	43.29

FIGURE 3 MS

A	B	C	D	E	F	G	H	I	J
18198	CB	TYR	D	17	-107.591	-31.146	41.877	1.00	42.92
18199	CG	TYR	D	17	-107.813	-30.211	40.708	1.00	41.77
18200	CD1	TYR	D	17	-108.774	-30.484	39.736	1.00	39.19
18201	CE1	TYR	D	17	-108.983	-29.624	38.683	1.00	38.15
18202	CZ	TYR	D	17	-108.224	-28.465	38.588	1.00	39.21
18203	OH	TYR	D	17	-108.399	-27.580	37.546	1.00	36.44
18204	CE2	TYR	D	17	-107.270	-28.179	39.541	1.00	39.84
18205	CD2	TYR	D	17	-107.072	-29.044	40.589	1.00	40.04
18206	C	TYR	D	17	-105.182	-31.736	41.387	1.00	42.57
18207	O	TYR	D	17	-104.624	-31.033	42.228	1.00	42.04
18208	N	THR	D	18	-104.598	-32.090	40.247	1.00	41.76
18209	CA	THR	D	18	-103.219	-31.709	39.939	1.00	41.00
18210	CB	THR	D	18	-102.514	-32.825	39.187	1.00	40.40
18211	OG1	THR	D	18	-103.228	-33.053	37.972	1.00	40.49
18212	CG2	THR	D	18	-102.598	-34.114	39.935	1.00	40.17
18213	C	THR	D	18	-103.117	-30.500	39.038	1.00	40.59
18214	O	THR	D	18	-104.111	-29.972	38.569	1.00	40.76
18215	N	LEU	D	19	-101.878	-30.118	38.759	1.00	40.02
18216	CA	LEU	D	19	-101.592	-29.002	37.889	1.00	39.77
18217	CB	LEU	D	19	-100.111	-28.637	37.974	1.00	39.21
18218	CG	LEU	D	19	-99.648	-27.489	37.095	1.00	37.71
18219	CD1	LEU	D	19	-100.422	-26.230	37.454	1.00	35.69
18220	CD2	LEU	D	19	-98.144	-27.279	37.279	1.00	37.86
18221	C	LEU	D	19	-101.959	-29.364	36.470	1.00	39.98
18222	O	LEU	D	19	-102.630	-28.601	35.784	1.00	39.95
18223	N	THR	D	20	-101.514	-30.535	36.026	1.00	40.46
18224	CA	THR	D	20	-101.875	-30.988	34.698	1.00	41.26
18225	CB	THR	D	20	-101.332	-32.419	34.420	1.00	41.48
18226	OG1	THR	D	20	-99.923	-32.461	34.690	1.00	43.06
18227	CG2	THR	D	20	-101.372	-32.730	32.938	1.00	41.78
18228	C	THR	D	20	-103.395	-30.921	34.594	1.00	41.40
18229	O	THR	D	20	-103.926	-30.375	33.636	1.00	42.00
18230	N	ASP	D	21	-104.101	-31.419	35.604	1.00	41.61
18231	CA	ASP	D	21	-105.559	-31.373	35.570	1.00	42.18
18232	CB	ASP	D	21	-106.169	-31.803	36.912	1.00	42.36
18233	CG	ASP	D	21	-105.920	-33.278	37.234	1.00	43.15
18234	OD1	ASP	D	21	-105.803	-34.096	36.290	1.00	43.47
18235	OD2	ASP	D	21	-105.830	-33.709	38.407	1.00	43.92
18236	C	ASP	D	21	-106.039	-29.977	35.204	1.00	42.09
18237	O	ASP	D	21	-106.884	-29.814	34.319	1.00	41.58
18238	N	TYR	D	22	-105.495	-28.972	35.895	1.00	42.01
18239	CA	TYR	D	22	-105.861	-27.586	35.649	1.00	41.53
18240	CB	TYR	D	22	-105.252	-26.665	36.710	1.00	41.76
18241	CG	TYR	D	22	-105.377	-25.196	36.396	1.00	39.80
18242	CD1	TYR	D	22	-106.612	-24.614	36.140	1.00	39.04
18243	CE1	TYR	D	22	-106.717	-23.265	35.839	1.00	38.61
18244	CZ	TYR	D	22	-105.574	-22.490	35.815	1.00	38.02
18245	OH	TYR	D	22	-105.641	-21.142	35.529	1.00	38.34
18246	CE2	TYR	D	22	-104.348	-23.050	36.070	1.00	37.72
18247	CD2	TYR	D	22	-104.254	-24.386	36.357	1.00	39.58
18248	C	TYR	D	22	-105.405	-27.147	34.287	1.00	41.60

FIGURE 3 MT

A	B	C	D	E	F	G	H	I	J
18249	O	TYR	D	22	-106.168	-26.553	33.540	1.00	41.54
18250	N	LEU	D	23	-104.162	-27.455	33.949	1.00	42.15
18251	CA	LEU	D	23	-103.614	-27.034	32.658	1.00	42.86
18252	CB	LEU	D	23	-102.097	-27.209	32.617	1.00	42.53
18253	CG	LEU	D	23	-101.334	-26.426	33.688	1.00	42.98
18254	CD1	LEU	D	23	-99.842	-26.401	33.402	1.00	40.18
18255	CD2	LEU	D	23	-101.895	-25.010	33.790	1.00	42.48
18256	C	LEU	D	23	-104.252	-27.732	31.465	1.00	43.63
18257	O	LEU	D	23	-104.326	-27.165	30.384	1.00	43.71
18258	N	LYS	D	24	-104.718	-28.962	31.656	1.00	44.61
18259	CA	LYS	D	24	-105.307	-29.703	30.547	1.00	45.83
18260	CB	LYS	D	24	-104.703	-31.103	30.447	1.00	45.69
18261	CG	LYS	D	24	-103.186	-31.110	30.303	1.00	45.41
18262	CD	LYS	D	24	-102.735	-30.517	28.978	1.00	44.15
18263	CE	LYS	D	24	-101.218	-30.572	28.859	1.00	43.82
18264	NZ	LYS	D	24	-100.717	-30.178	27.505	1.00	44.06
18265	C	LYS	D	24	-106.827	-29.779	30.626	1.00	46.53
18266	O	LYS	D	24	-107.458	-30.475	29.835	1.00	46.70
18267	N	ASN	D	25	-107.410	-29.064	31.582	1.00	47.48
18268	CA	ASN	D	25	-108.861	-29.017	31.719	1.00	48.45
18269	CB	ASN	D	25	-109.482	-28.246	30.558	1.00	48.72
18270	CG	ASN	D	25	-110.641	-27.378	30.999	1.00	51.15
18271	OD1	ASN	D	25	-111.797	-27.803	30.980	1.00	52.66
18272	ND2	ASN	D	25	-110.335	-26.144	31.413	1.00	53.94
18273	C	ASN	D	25	-109.437	-30.422	31.780	1.00	48.69
18274	O	ASN	D	25	-110.334	-30.786	31.017	1.00	48.74
18275	N	THR	D	26	-108.896	-31.211	32.693	1.00	48.91
18276	CA	THR	D	26	-109.313	-32.583	32.857	1.00	49.28
18277	CB	THR	D	26	-108.374	-33.283	33.827	1.00	49.12
18278	OG1	THR	D	26	-107.087	-33.419	33.212	1.00	48.89
18279	CG2	THR	D	26	-108.821	-34.718	34.060	1.00	49.93
18280	C	THR	D	26	-110.743	-32.621	33.360	1.00	49.63
18281	O	THR	D	26	-111.600	-33.295	32.786	1.00	49.55
18282	N	TYR	D	27	-111.001	-31.889	34.433	1.00	49.75
18283	CA	TYR	D	27	-112.341	-31.832	34.976	1.00	50.33
18284	CB	TYR	D	27	-112.300	-31.858	36.497	1.00	50.13
18285	CG	TYR	D	27	-111.493	-33.013	37.032	1.00	50.17
18286	CD1	TYR	D	27	-112.074	-34.262	37.225	1.00	50.65
18287	CE1	TYR	D	27	-111.338	-35.324	37.711	1.00	50.13
18288	CZ	TYR	D	27	-109.999	-35.147	38.002	1.00	50.51
18289	OH	TYR	D	27	-109.254	-36.199	38.482	1.00	49.41
18290	CE2	TYR	D	27	-109.399	-33.916	37.816	1.00	50.11
18291	CD2	TYR	D	27	-110.146	-32.863	37.328	1.00	50.05
18292	C	TYR	D	27	-113.015	-30.583	34.437	1.00	50.72
18293	O	TYR	D	27	-112.845	-29.491	34.963	1.00	51.02
18294	N	ARG	D	28	-113.770	-30.759	33.363	1.00	51.36
18295	CA	ARG	D	28	-114.399	-29.642	32.675	1.00	51.80
18296	CB	ARG	D	28	-114.632	-29.994	31.207	1.00	52.11
18297	CG	ARG	D	28	-114.695	-28.786	30.286	1.00	54.37
18298	CD	ARG	D	28	-114.251	-29.082	28.857	1.00	58.10
18299	NE	ARG	D	28	-113.024	-29.880	28.828	1.00	60.38

FIGURE 3 MU

A	B	C	D	E	F	G	H	I	J
18300	CZ	ARG	D	28	-112.573	-30.513	27.749	1.00	62.20
18301	NH1	ARG	D	28	-113.246	-30.433	26.601	1.00	61.96
18302	NH2	ARG	D	28	-111.448	-31.225	27.812	1.00	62.10
18303	C	ARG	D	28	-115.705	-29.216	33.328	1.00	51.52
18304	O	ARG	D	28	-116.432	-30.033	33.891	1.00	51.32
18305	N	LEU	D	29	-115.985	-27.924	33.246	1.00	51.44
18306	CA	LEU	D	29	-117.184	-27.352	33.823	1.00	51.71
18307	CB	LEU	D	29	-116.862	-26.001	34.464	1.00	51.76
18308	CG	LEU	D	29	-117.397	-25.689	35.863	1.00	51.86
18309	CD1	LEU	D	29	-117.174	-24.219	36.199	1.00	52.54
18310	CD2	LEU	D	29	-116.725	-26.560	36.896	1.00	50.90
18311	C	LEU	D	29	-118.175	-27.166	32.695	1.00	51.86
18312	O	LEU	D	29	-117.829	-26.644	31.636	1.00	51.83
18313	N	LYS	D	30	-119.410	-27.601	32.907	1.00	52.21
18314	CA	LYS	D	30	-120.423	-27.456	31.867	1.00	52.67
18315	CB	LYS	D	30	-121.306	-28.710	31.761	1.00	53.06
18316	CG	LYS	D	30	-120.826	-29.719	30.716	1.00	54.05
18317	CD	LYS	D	30	-121.616	-31.021	30.788	1.00	55.73
18318	CE	LYS	D	30	-121.273	-31.910	29.608	1.00	56.45
18319	NZ	LYS	D	30	-121.142	-31.078	28.371	1.00	56.95
18320	C	LYS	D	30	-121.271	-26.206	32.038	1.00	52.47
18321	O	LYS	D	30	-121.777	-25.921	33.119	1.00	52.14
18322	N	LEU	D	31	-121.423	-25.487	30.934	1.00	52.69
18323	CA	LEU	D	31	-122.201	-24.263	30.863	1.00	52.74
18324	CB	LEU	D	31	-121.416	-23.188	30.098	1.00	52.95
18325	CG	LEU	D	31	-120.111	-22.585	30.623	1.00	53.54
18326	CD1	LEU	D	31	-119.004	-23.622	30.673	1.00	53.94
18327	CD2	LEU	D	31	-119.696	-21.403	29.736	1.00	54.17
18328	C	LEU	D	31	-123.465	-24.528	30.069	1.00	52.59
18329	O	LEU	D	31	-123.580	-25.535	29.388	1.00	52.54
18330	N	TYR	D	32	-124.417	-23.613	30.138	1.00	52.53
18331	CA	TYR	D	32	-125.577	-23.720	29.271	1.00	52.53
18332	CB	TYR	D	32	-126.797	-24.261	30.009	1.00	52.27
18333	CG	TYR	D	32	-127.864	-24.763	29.075	1.00	52.18
18334	CD1	TYR	D	32	-128.703	-23.877	28.419	1.00	52.00
18335	CE1	TYR	D	32	-129.685	-24.324	27.558	1.00	52.36
18336	CZ	TYR	D	32	-129.841	-25.676	27.340	1.00	52.56
18337	OH	TYR	D	32	-130.833	-26.103	26.477	1.00	53.81
18338	CE2	TYR	D	32	-129.017	-26.583	27.975	1.00	52.66
18339	CD2	TYR	D	32	-128.029	-26.123	28.839	1.00	52.25
18340	C	TYR	D	32	-125.834	-22.348	28.680	1.00	52.56
18341	O	TYR	D	32	-126.610	-21.563	29.206	1.00	52.46
18342	N	SER	D	33	-125.158	-22.062	27.579	1.00	52.86
18343	CA	SER	D	33	-125.251	-20.755	26.964	1.00	53.35
18344	CB	SER	D	33	-123.942	-20.435	26.249	1.00	53.42
18345	OG	SER	D	33	-123.580	-19.079	26.443	1.00	55.27
18346	C	SER	D	33	-126.415	-20.695	25.986	1.00	53.35
18347	O	SER	D	33	-126.497	-21.499	25.061	1.00	53.27
18348	N	LEU	D	34	-127.318	-19.745	26.191	1.00	53.41
18349	CA	LEU	D	34	-128.459	-19.602	25.299	1.00	53.44
18350	CB	LEU	D	34	-129.746	-20.092	25.968	1.00	53.10

FIGURE 3 MV

A	B	C	D	E	F	G	H	I	J
18351	CG	LEU	D	34	-130.225	-19.356	27.220	1.00	53.46
18352	CD1	LEU	D	34	-130.978	-18.081	26.859	1.00	52.97
18353	CD2	LEU	D	34	-131.099	-20.262	28.066	1.00	53.49
18354	C	LEU	D	34	-128.632	-18.172	24.835	1.00	53.80
18355	O	LEU	D	34	-128.063	-17.245	25.406	1.00	53.33
18356	N	ARG	D	35	-129.430	-18.008	23.787	1.00	54.56
18357	CA	ARG	D	35	-129.723	-16.701	23.237	1.00	55.37
18358	CB	ARG	D	35	-129.021	-16.528	21.894	1.00	55.72
18359	CG	ARG	D	35	-127.543	-16.885	21.931	1.00	58.21
18360	CD	ARG	D	35	-126.992	-17.461	20.630	1.00	62.08
18361	NE	ARG	D	35	-125.559	-17.203	20.496	1.00	64.78
18362	CZ	ARG	D	35	-125.028	-16.391	19.585	1.00	65.80
18363	NH1	ARG	D	35	-125.808	-15.760	18.711	1.00	65.88
18364	NH2	ARG	D	35	-123.714	-16.211	19.546	1.00	65.79
18365	C	ARG	D	35	-131.221	-16.596	23.050	1.00	55.34
18366	O	ARG	D	35	-131.800	-17.317	22.245	1.00	55.67
18367	N	TRP	D	36	-131.861	-15.716	23.804	1.00	55.45
18368	CA	TRP	D	36	-133.284	-15.519	23.625	1.00	55.58
18369	CB	TRP	D	36	-133.866	-14.634	24.720	1.00	55.11
18370	CG	TRP	D	36	-133.847	-15.281	26.054	1.00	54.04
18371	CD1	TRP	D	36	-133.009	-14.999	27.088	1.00	53.20
18372	NE1	TRP	D	36	-133.290	-15.811	28.158	1.00	52.47
18373	CE2	TRP	D	36	-134.321	-16.646	27.825	1.00	52.20
18374	CD2	TRP	D	36	-134.699	-16.337	26.506	1.00	52.88
18375	CE3	TRP	D	36	-135.748	-17.058	25.926	1.00	52.40
18376	CZ3	TRP	D	36	-136.372	-18.036	26.669	1.00	52.17
18377	CH2	TRP	D	36	-135.974	-18.315	27.982	1.00	51.24
18378	CZ2	TRP	D	36	-134.954	-17.634	28.574	1.00	51.41
18379	C	TRP	D	36	-133.487	-14.890	22.256	1.00	56.26
18380	O	TRP	D	36	-132.865	-13.884	21.915	1.00	55.84
18381	N	ILE	D	37	-134.349	-15.516	21.468	1.00	57.29
18382	CA	ILE	D	37	-134.644	-15.056	20.127	1.00	58.06
18383	CB	ILE	D	37	-134.766	-16.271	19.205	1.00	58.19
18384	CG1	ILE	D	37	-133.814	-16.136	18.020	1.00	58.92
18385	CD1	ILE	D	37	-132.371	-16.010	18.440	1.00	59.40
18386	CG2	ILE	D	37	-136.215	-16.523	18.801	1.00	58.85
18387	C	ILE	D	37	-135.953	-14.300	20.209	1.00	58.33
18388	O	ILE	D	37	-136.236	-13.417	19.400	1.00	58.56
18389	N	SER	D	38	-136.740	-14.647	21.220	1.00	58.68
18390	CA	SER	D	38	-138.021	-14.010	21.463	1.00	59.15
18391	CB	SER	D	38	-139.119	-14.682	20.650	1.00	59.13
18392	OG	SER	D	38	-139.579	-15.848	21.320	1.00	59.77
18393	C	SER	D	38	-138.357	-14.171	22.928	1.00	59.35
18394	O	SER	D	38	-137.491	-14.467	23.745	1.00	59.50
18395	N	ASP	D	39	-139.637	-14.019	23.245	1.00	59.53
18396	CA	ASP	D	39	-140.113	-14.136	24.609	1.00	59.49
18397	CB	ASP	D	39	-141.367	-13.290	24.788	1.00	59.39
18398	CG	ASP	D	39	-141.507	-12.757	26.187	1.00	60.15
18399	OD1	ASP	D	39	-142.625	-12.337	26.550	1.00	61.22
18400	OD2	ASP	D	39	-140.558	-12.714	27.000	1.00	61.27
18401	C	ASP	D	39	-140.410	-15.573	25.009	1.00	59.56

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 MW**

A	B	C	D	E	F	G	H	I	J
18402	O	ASP	D	39	-140.781	-15.837	26.145	1.00	59.26
18403	N	HIS	D	40	-140.245	-16.512	24.090	1.00	60.02
18404	CA	HIS	D	40	-140.571	-17.891	24.420	1.00	60.67
18405	CB	HIS	D	40	-141.962	-18.228	23.895	1.00	61.24
18406	CG	HIS	D	40	-142.679	-17.050	23.323	1.00	62.71
18407	ND1	HIS	D	40	-143.549	-16.279	24.064	1.00	64.36
18408	CE1	HIS	D	40	-144.022	-15.304	23.307	1.00	65.09
18409	NE2	HIS	D	40	-143.480	-15.408	22.106	1.00	65.07
18410	CD2	HIS	D	40	-142.634	-16.490	22.091	1.00	64.38
18411	C	HIS	D	40	-139.571	-18.893	23.892	1.00	60.71
18412	O	HIS	D	40	-139.655	-20.077	24.207	1.00	60.52
18413	N	GLU	D	41	-138.621	-18.427	23.091	1.00	61.04
18414	CA	GLU	D	41	-137.649	-19.340	22.507	1.00	61.44
18415	CB	GLU	D	41	-138.019	-19.651	21.055	1.00	61.41
18416	CG	GLU	D	41	-139.515	-19.665	20.776	1.00	62.32
18417	CD	GLU	D	41	-139.826	-19.695	19.291	1.00	63.01
18418	OE1	GLU	D	41	-140.062	-18.609	18.701	1.00	62.19
18419	OE2	GLU	D	41	-139.823	-20.808	18.719	1.00	62.93
18420	C	GLU	D	41	-136.213	-18.831	22.559	1.00	61.54
18421	O	GLU	D	41	-135.950	-17.629	22.439	1.00	61.16
18422	N	TYR	D	42	-135.290	-19.776	22.719	1.00	61.94
18423	CA	TYR	D	80	-133.865	-19.482	22.726	1.00	62.41
18424	CB	TYR	D	80	-133.316	-19.474	24.158	1.00	61.91
18425	CG	TYR	D	80	-133.498	-20.769	24.922	1.00	60.62
18426	CD1	TYR	D	80	-132.702	-21.873	24.658	1.00	58.59
18427	CE1	TYR	D	80	-132.859	-23.046	25.360	1.00	57.20
18428	CZ	TYR	D	80	-133.816	-23.131	26.337	1.00	56.65
18429	OH	TYR	D	80	-133.975	-24.302	27.028	1.00	55.96
18430	CE2	TYR	D	80	-134.616	-22.055	26.627	1.00	57.99
18431	CD2	TYR	D	80	-134.456	-20.879	25.921	1.00	59.62
18432	C	TYR	D	80	-133.114	-20.489	21.855	1.00	63.24
18433	O	TYR	D	80	-133.634	-21.562	21.556	1.00	63.26
18434	N	LEU	D	81	-131.894	-20.142	21.457	1.00	64.36
18435	CA	LEU	D	81	-131.079	-21.021	20.625	1.00	65.66
18436	CB	LEU	D	81	-130.453	-20.244	19.466	1.00	65.62
18437	CG	LEU	D	81	-131.386	-19.504	18.506	1.00	65.31
18438	CD1	LEU	D	81	-130.580	-18.624	17.571	1.00	65.28
18439	CD2	LEU	D	81	-132.247	-20.480	17.719	1.00	65.16
18440	C	LEU	D	81	-129.974	-21.688	21.429	1.00	66.80
18441	O	LEU	D	81	-129.435	-21.098	22.362	1.00	66.97
18442	N	TYR	D	82	-129.633	-22.916	21.049	1.00	68.34
18443	CA	TYR	D	82	-128.584	-23.672	21.722	1.00	69.82
18444	CB	TYR	D	82	-129.186	-24.540	22.828	1.00	69.95
18445	CG	TYR	D	82	-128.161	-25.139	23.767	1.00	70.66
18446	CD1	TYR	D	82	-127.468	-24.340	24.665	1.00	71.01
18447	CE1	TYR	D	82	-126.533	-24.873	25.525	1.00	71.12
18448	CZ	TYR	D	82	-126.275	-26.226	25.500	1.00	71.46
18449	OH	TYR	D	82	-125.335	-26.752	26.360	1.00	71.77
18450	CE2	TYR	D	82	-126.949	-27.049	24.619	1.00	71.57
18451	CD2	TYR	D	82	-127.888	-26.503	23.758	1.00	71.27
18452	C	TYR	D	82	-127.848	-24.549	20.717	1.00	70.76

FIGURE 3 MX

A	B	C	D	E	F	G	H	I	J
18453	O	TYR	D	44	-128.317	-24.735	19.597	1.00	70.90
18454	N	LYS	D	45	-126.699	-25.088	21.114	1.00	72.12
18455	CA	LYS	D	45	-125.926	-25.955	20.228	1.00	73.44
18456	CB	LYS	D	45	-124.755	-25.192	19.599	1.00	73.38
18457	CG	LYS	D	45	-123.953	-24.337	20.555	1.00	73.74
18458	CD	LYS	D	45	-122.947	-23.474	19.795	1.00	74.29
18459	CE	LYS	D	45	-121.734	-24.277	19.331	1.00	74.20
18460	NZ	LYS	D	45	-120.701	-23.434	18.637	1.00	73.99
18461	C	LYS	D	45	-125.431	-27.230	20.912	1.00	74.32
18462	O	LYS	D	45	-125.079	-27.211	22.090	1.00	74.42
18463	N	GLN	D	46	-125.406	-28.331	20.159	1.00	75.53
18464	CA	GLN	D	46	-124.943	-29.626	20.670	1.00	76.63
18465	CB	GLN	D	46	-126.032	-30.688	20.521	1.00	76.65
18466	CG	GLN	D	46	-126.706	-31.000	21.844	1.00	77.46
18467	CD	GLN	D	46	-128.140	-31.440	21.695	1.00	77.98
18468	OE1	GLN	D	46	-128.996	-31.048	22.492	1.00	78.63
18469	NE2	GLN	D	46	-128.413	-32.259	20.685	1.00	78.04
18470	C	GLN	D	46	-123.618	-30.101	20.060	1.00	77.22
18471	O	GLN	D	46	-122.543	-29.752	20.564	1.00	77.30
18472	N	GLU	D	47	-123.698	-30.922	19.012	1.00	77.93
18473	CA	GLU	D	47	-122.513	-31.367	18.277	1.00	78.65
18474	CB	GLU	D	47	-122.956	-32.049	16.974	1.00	78.73
18475	CG	GLU	D	47	-121.979	-33.038	16.340	1.00	79.60
18476	CD	GLU	D	47	-122.658	-33.943	15.310	1.00	80.37
18477	OE1	GLU	D	47	-122.905	-35.134	15.618	1.00	80.34
18478	OE2	GLU	D	47	-122.958	-33.464	14.193	1.00	79.84
18479	C	GLU	D	47	-121.810	-30.060	17.963	1.00	78.87
18480	O	GLU	D	47	-120.766	-29.714	18.522	1.00	78.95
18481	N	ASN	D	48	-122.439	-29.340	17.051	1.00	79.03
18482	CA	ASN	D	48	-122.106	-27.980	16.693	1.00	79.17
18483	CB	ASN	D	48	-120.796	-27.853	15.913	1.00	79.39
18484	CG	ASN	D	48	-120.312	-26.396	15.808	1.00	79.85
18485	OD1	ASN	D	48	-120.890	-25.488	16.415	1.00	79.96
18486	ND2	ASN	D	48	-119.253	-26.176	15.032	1.00	79.80
18487	C	ASN	D	48	-123.322	-27.634	15.864	1.00	79.05
18488	O	ASN	D	48	-123.317	-26.721	15.043	1.00	79.01
18489	N	ASN	D	49	-124.364	-28.437	16.078	1.00	78.88
18490	CA	ASN	D	49	-125.670	-28.187	15.507	1.00	78.77
18491	CB	ASN	D	49	-126.641	-29.306	15.883	1.00	79.00
18492	CG	ASN	D	49	-126.655	-30.451	14.886	1.00	79.55
18493	OD1	ASN	D	49	-126.781	-31.610	15.275	1.00	80.11
18494	ND2	ASN	D	49	-126.556	-30.133	13.599	1.00	80.29
18495	C	ASN	D	49	-126.137	-26.947	16.219	1.00	78.53
18496	O	ASN	D	49	-125.639	-26.640	17.299	1.00	78.67
18497	N	ILE	D	50	-127.087	-26.227	15.644	1.00	78.07
18498	CA	ILE	D	50	-127.646	-25.083	16.352	1.00	77.53
18499	CB	ILE	D	50	-127.129	-23.744	15.787	1.00	77.63
18500	CG1	ILE	D	50	-125.938	-23.273	16.632	1.00	77.74
18501	CD1	ILE	D	50	-124.959	-22.387	15.900	1.00	78.44
18502	CG2	ILE	D	50	-128.215	-22.684	15.817	1.00	77.47
18503	C	ILE	D	50	-129.164	-25.189	16.423	1.00	77.15

FIGURE 3 MY

A	B	C	D	E	F	G	H	I	J
18504	O	ILE	D	50	-129.877	-24.945	15.449	1.00	77.13
18505	N	LEU	D	51	-129.637	-25.585	17.600	1.00	76.58
18506	CA	LEU	D	51	-131.051	-25.847	17.832	1.00	76.10
18507	CB	LEU	D	51	-131.215	-26.917	18.917	1.00	75.99
18508	CG	LEU	D	51	-130.782	-28.350	18.608	1.00	75.89
18509	CD1	LEU	D	51	-129.381	-28.391	18.026	1.00	75.81
18510	CD2	LEU	D	51	-130.866	-29.205	19.865	1.00	75.82
18511	C	LEU	D	51	-131.871	-24.626	18.228	1.00	75.75
18512	O	LEU	D	51	-131.384	-23.499	18.258	1.00	75.75
18513	N	VAL	D	52	-133.137	-24.888	18.523	1.00	75.24
18514	CA	VAL	D	52	-134.077	-23.883	18.982	1.00	74.85
18515	CB	VAL	D	52	-134.992	-23.372	17.851	1.00	74.86
18516	CG1	VAL	D	52	-135.927	-22.293	18.365	1.00	74.39
18517	CG2	VAL	D	52	-135.792	-24.519	17.250	1.00	75.16
18518	C	VAL	D	52	-134.926	-24.584	20.021	1.00	74.56
18519	O	VAL	D	52	-135.341	-25.730	19.825	1.00	74.55
18520	N	PHE	D	53	-135.172	-23.908	21.135	1.00	74.03
18521	CA	PHE	D	53	-135.937	-24.512	22.206	1.00	73.50
18522	CB	PHE	D	53	-135.085	-24.629	23.467	1.00	73.31
18523	CG	PHE	D	53	-134.127	-25.783	23.454	1.00	72.34
18524	CD1	PHE	D	53	-132.980	-25.745	22.677	1.00	71.52
18525	CE1	PHE	D	53	-132.094	-26.806	22.673	1.00	71.38
18526	CZ	PHE	D	53	-132.349	-27.920	23.454	1.00	71.45
18527	CE2	PHE	D	53	-133.490	-27.965	24.237	1.00	71.06
18528	CD2	PHE	D	53	-134.367	-26.901	24.237	1.00	71.23
18529	C	PHE	D	53	-137.189	-23.727	22.533	1.00	73.55
18530	O	PHE	D	53	-137.224	-22.503	22.436	1.00	73.37
18531	N	ASN	D	54	-138.229	-24.452	22.911	1.00	73.74
18532	CA	ASN	D	54	-139.442	-23.828	23.393	1.00	74.00
18533	CB	ASN	D	54	-140.656	-24.691	23.059	1.00	73.94
18534	CG	ASN	D	54	-141.966	-23.973	23.303	1.00	73.93
18535	OD1	ASN	D	54	-142.492	-23.295	22.414	1.00	74.01
18536	ND2	ASN	D	54	-142.503	-24.115	24.511	1.00	73.20
18537	C	ASN	D	54	-139.237	-23.743	24.896	1.00	74.19
18538	O	ASN	D	54	-138.985	-24.757	25.543	1.00	74.23
18539	N	ALA	D	55	-139.306	-22.543	25.454	1.00	74.39
18540	CA	ALA	D	55	-139.037	-22.393	26.876	1.00	74.79
18541	CB	ALA	D	55	-138.990	-20.924	27.270	1.00	74.66
18542	C	ALA	D	55	-140.082	-23.128	27.687	1.00	75.07
18543	O	ALA	D	55	-139.766	-23.828	28.650	1.00	74.91
18544	N	GLU	D	56	-141.330	-22.981	27.271	1.00	75.59
18545	CA	GLU	D	56	-142.441	-23.583	27.981	1.00	76.20
18546	CB	GLU	D	56	-143.759	-23.051	27.421	1.00	76.39
18547	CG	GLU	D	56	-144.987	-23.506	28.187	1.00	77.36
18548	CD	GLU	D	56	-145.964	-22.373	28.429	1.00	78.96
18549	OE1	GLU	D	56	-146.895	-22.191	27.608	1.00	78.93
18550	OE2	GLU	D	56	-145.789	-21.659	29.445	1.00	79.50
18551	C	GLU	D	56	-142.420	-25.105	27.940	1.00	76.45
18552	O	GLU	D	56	-142.755	-25.758	28.929	1.00	76.46
18553	N	TYR	D	57	-142.010	-25.672	26.808	1.00	76.74
18554	CA	TYR	D	57	-142.025	-27.128	26.646	1.00	77.16



FIGURE 3 MZ

A	B	C	D	E	F	G	H	I	J
18555	CB	TYR	D	57	-142.721	-27.512	25.338	1.00	77.31
18556	CG	TYR	D	57	-144.107	-26.930	25.186	1.00	77.56
18557	CD1	TYR	D	57	-144.962	-26.823	26.276	1.00	78.01
18558	CE1	TYR	D	57	-146.233	-26.290	26.140	1.00	78.45
18559	CZ	TYR	D	57	-146.661	-25.857	24.899	1.00	78.98
18560	OH	TYR	D	57	-147.924	-25.329	24.753	1.00	79.47
18561	CE2	TYR	D	57	-145.827	-25.952	23.803	1.00	78.89
18562	CD2	TYR	D	57	-144.560	-26.488	23.951	1.00	78.24
18563	C	TYR	D	57	-140.649	-27.788	26.704	1.00	77.30
18564	O	TYR	D	57	-140.448	-28.750	27.451	1.00	77.24
18565	N	GLY	D	58	-139.713	-27.286	25.902	1.00	77.50
18566	CA	GLY	D	58	-138.367	-27.836	25.867	1.00	77.58
18567	C	GLY	D	58	-137.942	-28.299	24.486	1.00	77.47
18568	O	GLY	D	58	-137.676	-29.481	24.271	1.00	77.49
18569	N	VAL	D	62	-133.961	-29.159	15.079	1.00	83.22
18570	CA	VAL	D	62	-132.871	-28.300	14.537	1.00	83.38
18571	CB	VAL	D	62	-132.081	-29.032	13.430	1.00	83.34
18572	CG1	VAL	D	62	-130.908	-28.195	12.960	1.00	83.33
18573	CG2	VAL	D	62	-131.602	-30.384	13.928	1.00	83.42
18574	C	VAL	D	62	-133.424	-26.981	13.990	1.00	83.44
18575	O	VAL	D	62	-134.581	-26.903	13.581	1.00	83.40
18576	N	PHE	D	63	-132.591	-25.947	14.008	1.00	83.48
18577	CA	PHE	D	63	-132.954	-24.638	13.484	1.00	83.59
18578	CB	PHE	D	63	-132.846	-23.575	14.581	1.00	83.53
18579	CG	PHE	D	63	-132.810	-22.160	14.063	1.00	83.01
18580	CD1	PHE	D	63	-131.605	-21.553	13.744	1.00	82.34
18581	CE1	PHE	D	63	-131.571	-20.258	13.270	1.00	82.12
18582	CZ	PHE	D	63	-132.746	-19.549	13.116	1.00	82.46
18583	CE2	PHE	D	63	-133.952	-20.137	13.434	1.00	82.52
18584	CD2	PHE	D	63	-133.980	-21.436	13.904	1.00	82.81
18585	C	PHE	D	63	-131.984	-24.325	12.360	1.00	83.79
18586	O	PHE	D	63	-132.303	-23.604	11.413	1.00	83.64
18587	N	LEU	D	64	-130.791	-24.892	12.487	1.00	84.09
18588	CA	LEU	D	64	-129.728	-24.728	11.513	1.00	84.53
18589	CB	LEU	D	64	-129.156	-23.315	11.593	1.00	84.49
18590	CG	LEU	D	64	-128.367	-22.810	10.387	1.00	84.86
18591	CD1	LEU	D	64	-126.883	-23.100	10.544	1.00	85.36
18592	CD2	LEU	D	64	-128.912	-23.405	9.098	1.00	85.27
18593	C	LEU	D	64	-128.676	-25.771	11.857	1.00	84.75
18594	O	LEU	D	64	-128.028	-25.688	12.897	1.00	84.83
18595	N	GLU	D	65	-128.530	-26.773	10.999	1.00	85.08
18596	CA	GLU	D	65	-127.599	-27.863	11.270	1.00	85.31
18597	CB	GLU	D	65	-128.250	-29.215	10.961	1.00	85.43
18598	CG	GLU	D	65	-128.834	-29.335	9.559	1.00	85.81
18599	CD	GLU	D	65	-128.974	-30.781	9.108	1.00	86.74
18600	OE1	GLU	D	65	-129.157	-31.019	7.890	1.00	86.19
18601	OE2	GLU	D	65	-128.892	-31.682	9.973	1.00	87.10
18602	C	GLU	D	65	-126.310	-27.720	10.482	1.00	85.36
18603	O	GLU	D	65	-126.332	-27.649	9.255	1.00	85.27
18604	N	ASN	D	66	-125.177	-27.682	11.172	1.00	85.66
18605	CA	ASN	D	66	-123.935	-27.549	10.429	1.00	85.86

FIGURE 3 NA

A	B	C	D	E	F	G	H	I	J
18606	CB	ASN	D	66	-122.739	-27.089	11.261	1.00	85.95
18607	CG	ASN	D	66	-121.740	-26.298	10.423	1.00	86.51
18608	OD1	ASN	D	66	-121.971	-26.056	9.231	1.00	86.46
18609	ND2	ASN	D	66	-120.634	-25.886	11.038	1.00	86.95
18610	C	ASN	D	66	-123.632	-28.797	9.625	1.00	85.77
18611	O	ASN	D	66	-123.426	-29.897	10.150	1.00	85.83
18612	N	SER	D	67	-123.642	-28.560	8.325	1.00	85.60
18613	CA	SER	D	67	-123.456	-29.518	7.266	1.00	85.38
18614	CB	SER	D	67	-124.434	-30.681	7.392	1.00	85.46
18615	OG	SER	D	67	-125.754	-30.273	7.079	1.00	85.72
18616	C	SER	D	67	-123.911	-28.552	6.207	1.00	85.18
18617	O	SER	D	67	-123.708	-28.739	5.006	1.00	85.31
18618	N	THR	D	68	-124.525	-27.487	6.721	1.00	84.81
18619	CA	THR	D	68	-125.035	-26.374	5.946	1.00	84.50
18620	CB	THR	D	68	-125.882	-25.472	6.856	1.00	84.49
18621	OG1	THR	D	68	-126.882	-26.254	7.520	1.00	84.48
18622	CG2	THR	D	68	-126.690	-24.480	6.034	1.00	84.49
18623	C	THR	D	68	-123.864	-25.567	5.426	1.00	84.31
18624	O	THR	D	68	-123.836	-25.145	4.271	1.00	84.14
18625	N	PHE	D	69	-122.893	-25.352	6.301	1.00	84.23
18626	CA	PHE	D	69	-121.712	-24.591	5.944	1.00	84.08
18627	CB	PHE	D	69	-121.579	-23.375	6.855	1.00	83.82
18628	CG	PHE	D	69	-122.827	-22.544	6.934	1.00	82.91
18629	CD1	PHE	D	69	-123.228	-21.771	5.856	1.00	82.28
18630	CE1	PHE	D	69	-124.377	-21.001	5.923	1.00	81.61
18631	CZ	PHE	D	69	-125.137	-21.000	7.070	1.00	81.37
18632	CE2	PHE	D	69	-124.748	-21.769	8.152	1.00	81.68
18633	CD2	PHE	D	69	-123.600	-22.535	8.081	1.00	81.88
18634	C	PHE	D	69	-120.481	-25.474	6.026	1.00	84.24
18635	O	PHE	D	69	-119.565	-25.219	6.806	1.00	84.37
18636	N	ASP	D	70	-120.470	-26.525	5.216	1.00	84.43
18637	CA	ASP	D	70	-119.340	-27.443	5.202	1.00	84.64
18638	CB	ASP	D	70	-119.796	-28.881	5.472	1.00	84.75
18639	CG	ASP	D	70	-120.033	-29.147	6.958	1.00	85.27
18640	OD1	ASP	D	70	-119.480	-28.400	7.797	1.00	85.62
18641	OD2	ASP	D	70	-120.749	-30.077	7.387	1.00	85.61
18642	C	ASP	D	70	-118.503	-27.333	3.927	1.00	84.52
18643	O	ASP	D	70	-117.520	-28.050	3.763	1.00	84.45
18644	N	GLU	D	71	-118.898	-26.430	3.032	1.00	84.45
18645	CA	GLU	D	71	-118.112	-26.151	1.830	1.00	84.41
18646	CB	GLU	D	71	-118.313	-27.217	0.733	1.00	84.55
18647	CG	GLU	D	71	-119.445	-26.955	-0.245	1.00	85.22
18648	CD	GLU	D	71	-119.026	-27.195	-1.687	1.00	86.06
18649	OE1	GLU	D	71	-119.589	-26.533	-2.591	1.00	86.19
18650	OE2	GLU	D	71	-118.128	-28.037	-1.917	1.00	86.29
18651	C	GLU	D	71	-118.344	-24.713	1.336	1.00	84.10
18652	O	GLU	D	71	-118.526	-24.449	0.145	1.00	84.10
18653	N	PHE	D	72	-118.336	-23.782	2.282	1.00	83.66
18654	CA	PHE	D	72	-118.477	-22.371	1.949	1.00	83.21
18655	CB	PHE	D	72	-119.472	-21.669	2.881	1.00	83.47
18656	CG	PHE	D	72	-118.846	-21.054	4.094	1.00	83.83

FIGURE 3 NB

A	B	C	D	E	F	G	H	I	J
18657	CD1	PHE	D	72	-118.310	-21.847	5.093	1.00	84.40
18658	CE1	PHE	D	72	-117.737	-21.277	6.210	1.00	84.80
18659	CZ	PHE	D	72	-117.695	-19.901	6.341	1.00	84.99
18660	CE2	PHE	D	72	-118.229	-19.100	5.352	1.00	84.80
18661	CD2	PHE	D	72	-118.803	-19.677	4.239	1.00	84.27
18662	C	PHE	D	72	-117.093	-21.715	1.967	1.00	82.57
18663	O	PHE	D	72	-116.947	-20.506	1.754	1.00	82.33
18664	N	GLY	D	73	-116.085	-22.544	2.238	1.00	81.88
18665	CA	GLY	D	73	-114.693	-22.138	2.155	1.00	80.90
18666	C	GLY	D	73	-113.908	-21.819	3.414	1.00	80.12
18667	O	GLY	D	73	-112.691	-22.018	3.447	1.00	80.16
18668	N	HIS	D	74	-114.571	-21.317	4.448	1.00	79.14
18669	CA	HIS	D	74	-113.844	-20.912	5.644	1.00	78.20
18670	CB	HIS	D	74	-113.872	-19.391	5.784	1.00	78.23
18671	CG	HIS	D	74	-113.674	-18.651	4.494	1.00	78.28
18672	ND1	HIS	D	74	-112.450	-18.146	4.105	1.00	78.33
18673	CE1	HIS	D	74	-112.579	-17.529	2.944	1.00	78.17
18674	NE2	HIS	D	74	-113.843	-17.608	2.568	1.00	77.82
18675	CD2	HIS	D	74	-114.549	-18.304	3.519	1.00	78.10
18676	C	HIS	D	74	-114.389	-21.552	6.910	1.00	77.45
18677	O	HIS	D	74	-115.388	-22.264	6.872	1.00	77.60
18678	N	SER	D	75	-113.716	-21.316	8.031	1.00	76.48
18679	CA	SER	D	75	-114.196	-21.825	9.312	1.00	75.42
18680	CB	SER	D	75	-113.045	-22.173	10.250	1.00	75.46
18681	OG	SER	D	75	-113.531	-22.861	11.388	1.00	74.94
18682	C	SER	D	75	-115.089	-20.760	9.931	1.00	74.71
18683	O	SER	D	75	-114.994	-19.584	9.575	1.00	74.71
18684	N	ILE	D	76	-115.956	-21.163	10.853	1.00	73.61
18685	CA	ILE	D	76	-116.908	-20.220	11.426	1.00	72.53
18686	CB	ILE	D	76	-118.347	-20.638	11.075	1.00	72.60
18687	CG1	ILE	D	76	-118.484	-20.801	9.561	1.00	72.56
18688	CD1	ILE	D	76	-119.863	-21.200	9.099	1.00	71.45
18689	CG2	ILE	D	76	-119.346	-19.612	11.601	1.00	72.53
18690	C	ILE	D	76	-116.747	-20.017	12.931	1.00	71.73
18691	O	ILE	D	76	-117.134	-20.869	13.741	1.00	71.52
18692	N	ASN	D	77	-116.181	-18.871	13.292	1.00	70.56
18693	CA	ASN	D	77	-115.957	-18.530	14.689	1.00	69.44
18694	CB	ASN	D	77	-114.990	-17.352	14.805	1.00	69.52
18695	CG	ASN	D	77	-114.734	-16.953	16.241	1.00	69.69
18696	OD1	ASN	D	77	-114.420	-17.798	17.078	1.00	70.75
18697	ND2	ASN	D	77	-114.881	-15.666	16.541	1.00	69.22
18698	C	ASN	D	77	-117.255	-18.202	15.407	1.00	68.57
18699	O	ASN	D	77	-117.593	-18.819	16.414	1.00	68.24
18700	N	ASP	D	78	-117.986	-17.226	14.881	1.00	67.69
18701	CA	ASP	D	78	-119.234	-16.817	15.507	1.00	66.94
18702	CB	ASP	D	78	-119.013	-15.598	16.398	1.00	66.72
18703	CG	ASP	D	78	-119.851	-15.638	17.657	1.00	66.78
18704	OD1	ASP	D	78	-120.937	-16.258	17.648	1.00	65.33
18705	OD2	ASP	D	78	-119.495	-15.079	18.717	1.00	68.20
18706	C	ASP	D	78	-120.286	-16.494	14.469	1.00	66.38
18707	O	ASP	D	78	-119.969	-16.197	13.318	1.00	66.58

FIGURE 3 NC

A	B	C	D	E	F	G	H	I	J
18708	N	TYR	D	79	-121.542	-16.537	14.890	1.00	65.60
18709	CA	TYR	D	79	-122.648	-16.235	14.007	1.00	65.15
18710	CB	TYR	D	79	-123.374	-17.520	13.612	1.00	65.19
18711	CG	TYR	D	79	-124.214	-18.068	14.734	1.00	65.06
18712	CD1	TYR	D	79	-123.661	-18.893	15.705	1.00	64.87
18713	CE1	TYR	D	79	-124.429	-19.383	16.740	1.00	64.97
18714	CZ	TYR	D	79	-125.765	-19.041	16.816	1.00	65.33
18715	OH	TYR	D	79	-126.555	-19.514	17.842	1.00	65.81
18716	CE2	TYR	D	79	-126.326	-18.218	15.868	1.00	65.17
18717	CD2	TYR	D	79	-125.553	-17.735	14.841	1.00	64.78
18718	C	TYR	D	79	-123.620	-15.327	14.729	1.00	64.70
18719	O	TYR	D	79	-123.613	-15.245	15.948	1.00	64.70
18720	N	SER	D	80	-124.461	-14.647	13.966	1.00	64.24
18721	CA	SER	D	80	-125.489	-13.801	14.539	1.00	63.93
18722	CB	SER	D	80	-125.011	-12.353	14.643	1.00	64.13
18723	OG	SER	D	80	-126.094	-11.481	14.935	1.00	64.06
18724	C	SER	D	80	-126.739	-13.888	13.674	1.00	63.70
18725	O	SER	D	80	-126.727	-13.531	12.498	1.00	63.51
18726	N	ILE	D	81	-127.818	-14.381	14.259	1.00	63.43
18727	CA	ILE	D	81	-129.068	-14.490	13.536	1.00	63.30
18728	CB	ILE	D	81	-129.919	-15.648	14.109	1.00	63.41
18729	CG1	ILE	D	81	-131.067	-15.998	13.172	1.00	63.41
18730	CD1	ILE	D	81	-132.395	-15.522	13.681	1.00	64.28
18731	CG2	ILE	D	81	-130.482	-15.281	15.471	1.00	63.53
18732	C	ILE	D	81	-129.814	-13.164	13.608	1.00	63.27
18733	O	ILE	D	81	-129.892	-12.537	14.670	1.00	63.14
18734	N	SER	D	82	-130.330	-12.723	12.466	1.00	63.18
18735	CA	SER	D	82	-131.118	-11.502	12.402	1.00	63.33
18736	CB	SER	D	82	-131.666	-11.315	10.985	1.00	63.49
18737	OG	SER	D	82	-133.021	-10.893	11.001	1.00	64.27
18738	C	SER	D	82	-132.255	-11.598	13.418	1.00	63.16
18739	O	SER	D	82	-132.758	-12.683	13.683	1.00	63.06
18740	N	PRO	D	83	-132.644	-10.472	14.002	1.00	63.18
18741	CA	PRO	D	83	-133.703	-10.453	15.018	1.00	63.33
18742	CB	PRO	D	83	-133.758	-8.980	15.438	1.00	63.18
18743	CG	PRO	D	83	-132.471	-8.414	15.001	1.00	63.17
18744	CD	PRO	D	83	-132.095	-9.132	13.747	1.00	63.09
18745	C	PRO	D	83	-135.070	-10.882	14.481	1.00	63.62
18746	O	PRO	D	83	-135.923	-11.318	15.263	1.00	63.80
18747	N	ASP	D	84	-135.284	-10.754	13.173	1.00	63.53
18748	CA	ASP	D	84	-136.564	-11.137	12.586	1.00	63.36
18749	CB	ASP	D	84	-136.971	-10.178	11.466	1.00	63.39
18750	CG	ASP	D	84	-136.091	-10.295	10.248	1.00	63.23
18751	OD1	ASP	D	84	-135.357	-11.301	10.130	1.00	62.23
18752	OD2	ASP	D	84	-136.072	-9.421	9.356	1.00	63.40
18753	C	ASP	D	84	-136.539	-12.569	12.083	1.00	63.32
18754	O	ASP	D	84	-137.450	-13.010	11.392	1.00	63.35
18755	N	GLY	D	85	-135.474	-13.284	12.424	1.00	63.38
18756	CA	GLY	D	85	-135.340	-14.685	12.077	1.00	63.24
18757	C	GLY	D	85	-135.015	-14.989	10.630	1.00	63.26
18758	O	GLY	D	85	-134.825	-16.151	10.277	1.00	63.30

FIGURE 3 ND

A	B	C	D	E	F	G	H	I	J
18759	N	GLN	D	86	-134.934	-13.961	9.792	1.00	63.30
18760	CA	GLN	D	86	-134.673	-14.169	8.368	1.00	63.43
18761	CB	GLN	D	86	-135.209	-12.998	7.541	1.00	63.52
18762	CG	GLN	D	86	-136.733	-12.951	7.521	1.00	64.35
18763	CD	GLN	D	86	-137.282	-11.754	6.778	1.00	65.38
18764	OE1	GLN	D	86	-137.961	-10.912	7.372	1.00	65.62
18765	NE2	GLN	D	86	-137.002	-11.675	5.476	1.00	65.65
18766	C	GLN	D	86	-133.218	-14.475	8.008	1.00	63.32
18767	O	GLN	D	86	-132.924	-15.501	7.397	1.00	63.52
18768	N	PHE	D	87	-132.304	-13.593	8.392	1.00	63.19
18769	CA	PHE	D	87	-130.907	-13.772	8.021	1.00	62.76
18770	CB	PHE	D	87	-130.344	-12.466	7.482	1.00	62.99
18771	CG	PHE	D	87	-131.043	-11.970	6.262	1.00	63.91
18772	CD1	PHE	D	87	-130.733	-12.487	5.014	1.00	64.41
18773	CE1	PHE	D	87	-131.373	-12.027	3.877	1.00	64.88
18774	CZ	PHE	D	87	-132.336	-11.043	3.981	1.00	65.49
18775	CE2	PHE	D	87	-132.657	-10.518	5.228	1.00	65.49
18776	CD2	PHE	D	87	-132.011	-10.984	6.358	1.00	64.68
18777	C	PHE	D	87	-129.996	-14.282	9.132	1.00	62.35
18778	O	PHE	D	87	-130.378	-14.352	10.300	1.00	62.63
18779	N	ILE	D	88	-128.786	-14.656	8.736	1.00	61.42
18780	CA	ILE	D	88	-127.760	-15.054	9.673	1.00	60.54
18781	CB	ILE	D	88	-127.588	-16.577	9.741	1.00	60.82
18782	CG1	ILE	D	88	-126.251	-16.918	10.413	1.00	60.96
18783	CD1	ILE	D	88	-126.024	-18.405	10.653	1.00	62.14
18784	CG2	ILE	D	88	-127.633	-17.170	8.368	1.00	60.40
18785	C	ILE	D	88	-126.462	-14.419	9.241	1.00	59.79
18786	O	ILE	D	88	-126.043	-14.541	8.087	1.00	59.64
18787	N	LEU	D	89	-125.842	-13.711	10.175	1.00	58.71
18788	CA	LEU	D	89	-124.556	-13.117	9.923	1.00	57.45
18789	CB	LEU	D	89	-124.316	-11.987	10.909	1.00	57.41
18790	CG	LEU	D	89	-123.070	-11.161	10.622	1.00	57.49
18791	CD1	LEU	D	89	-122.988	-10.017	11.608	1.00	57.05
18792	CD2	LEU	D	89	-123.098	-10.650	9.191	1.00	56.64
18793	C	LEU	D	89	-123.532	-14.215	10.128	1.00	56.69
18794	O	LEU	D	89	-123.682	-15.044	11.029	1.00	56.50
18795	N	LEU	D	90	-122.513	-14.254	9.277	1.00	55.64
18796	CA	LEU	D	90	-121.441	-15.228	9.447	1.00	54.69
18797	CB	LEU	D	90	-121.392	-16.246	8.306	1.00	54.88
18798	CG	LEU	D	90	-122.565	-17.225	8.179	1.00	55.57
18799	CD1	LEU	D	90	-122.482	-18.002	6.863	1.00	55.72
18800	CD2	LEU	D	90	-122.642	-18.193	9.369	1.00	56.14
18801	C	LEU	D	90	-120.106	-14.514	9.612	1.00	53.74
18802	O	LEU	D	90	-119.693	-13.708	8.777	1.00	53.63
18803	N	GLU	D	91	-119.452	-14.821	10.720	1.00	52.71
18804	CA	GLU	D	91	-118.185	-14.228	11.089	1.00	51.54
18805	CB	GLU	D	91	-118.241	-13.849	12.569	1.00	51.93
18806	CG	GLU	D	91	-117.111	-12.974	13.083	1.00	52.01
18807	CD	GLU	D	91	-117.414	-12.450	14.471	1.00	52.71
18808	OE1	GLU	D	91	-117.001	-13.103	15.455	1.00	53.26
18809	OE2	GLU	D	91	-118.089	-11.402	14.574	1.00	52.28

FIGURE 3 NE

A	B	C	D	E	F	G	H	I	J
18810	C	GLU	D	91	-117.083	-15.244	10.879	1.00	50.56
18811	O	GLU	D	91	-117.157	-16.374	11.378	1.00	50.30
18812	N	TYR	D	92	-116.055	-14.837	10.149	1.00	49.43
18813	CA	TYR	D	92	-114.918	-15.707	9.899	1.00	48.37
18814	CB	TYR	D	92	-115.196	-16.650	8.724	1.00	48.77
18815	CG	TYR	D	92	-115.437	-15.951	7.407	1.00	47.98
18816	CD1	TYR	D	92	-116.603	-15.238	7.186	1.00	48.58
18817	CE1	TYR	D	92	-116.833	-14.598	5.977	1.00	50.05
18818	CZ	TYR	D	92	-115.884	-14.676	4.976	1.00	49.53
18819	OH	TYR	D	92	-116.112	-14.035	3.780	1.00	50.03
18820	CE2	TYR	D	92	-114.713	-15.384	5.180	1.00	48.92
18821	CD2	TYR	D	92	-114.500	-16.016	6.386	1.00	47.76
18822	C	TYR	D	92	-113.695	-14.847	9.642	1.00	47.68
18823	O	TYR	D	92	-113.818	-13.648	9.395	1.00	47.18
18824	N	ASN	D	93	-112.521	-15.463	9.692	1.00	47.05
18825	CA	ASN	D	93	-111.272	-14.721	9.583	1.00	47.12
18826	CB	ASN	D	93	-111.129	-14.065	8.215	1.00	47.56
18827	CG	ASN	D	93	-110.728	-15.063	7.146	1.00	49.03
18828	OD1	ASN	D	93	-110.356	-16.200	7.458	1.00	50.33
18829	ND2	ASN	D	93	-110.797	-14.648	5.883	1.00	48.85
18830	C	ASN	D	93	-111.119	-13.720	10.737	1.00	46.43
18831	O	ASN	D	93	-110.718	-12.555	10.561	1.00	45.96
18832	N	TYR	D	94	-111.456	-14.214	11.920	1.00	45.67
18833	CA	TYR	D	94	-111.351	-13.459	13.165	1.00	45.50
18834	CB	TYR	D	94	-111.980	-14.277	14.298	1.00	45.58
18835	CG	TYR	D	94	-111.609	-13.851	15.704	1.00	46.25
18836	CD1	TYR	D	94	-112.362	-12.902	16.388	1.00	45.76
18837	CE1	TYR	D	94	-112.043	-12.534	17.679	1.00	45.45
18838	CZ	TYR	D	94	-110.962	-13.119	18.305	1.00	46.65
18839	OH	TYR	D	94	-110.629	-12.765	19.597	1.00	45.85
18840	CE2	TYR	D	94	-110.210	-14.076	17.649	1.00	46.49
18841	CD2	TYR	D	94	-110.535	-14.435	16.364	1.00	46.48
18842	C	TYR	D	94	-109.911	-13.129	13.546	1.00	44.63
18843	O	TYR	D	94	-109.115	-14.026	13.806	1.00	44.39
18844	N	VAL	D	95	-109.573	-11.846	13.554	1.00	43.64
18845	CA	VAL	D	95	-108.281	-11.437	14.087	1.00	43.01
18846	CB	VAL	D	95	-107.334	-10.815	13.034	1.00	43.31
18847	CG1	VAL	D	95	-106.030	-10.381	13.700	1.00	42.61
18848	CG2	VAL	D	95	-107.039	-11.808	11.898	1.00	42.96
18849	C	VAL	D	95	-108.511	-10.473	15.250	1.00	42.24
18850	O	VAL	D	95	-108.874	-9.311	15.059	1.00	42.07
18851	N	LYS	D	96	-108.299	-10.986	16.458	1.00	41.35
18852	CA	LYS	D	96	-108.477	-10.235	17.696	1.00	39.85
18853	CB	LYS	D	96	-108.243	-11.162	18.886	1.00	40.10
18854	CG	LYS	D	96	-108.004	-10.449	20.204	1.00	40.77
18855	CD	LYS	D	96	-107.842	-11.437	21.357	1.00	41.13
18856	CE	LYS	D	96	-107.905	-10.718	22.701	1.00	41.42
18857	NZ	LYS	D	96	-106.968	-9.565	22.765	1.00	40.32
18858	C	LYS	D	96	-107.534	-9.051	17.817	1.00	38.99
18859	O	LYS	D	96	-106.360	-9.162	17.482	1.00	38.20
18860	N	GLN	D	97	-108.062	-7.921	18.294	1.00	37.80

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 NF**

A	B	C	D	E	F	G	H	I	J
18861	CA	GLN	D	97	-107.241	-6.753	18.574	1.00	36.98
18862	CB	GLN	D	97	-107.837	-5.459	18.007	1.00	37.03
18863	CG	GLN	D	97	-106.787	-4.329	17.891	1.00	39.86
18864	CD	GLN	D	97	-107.361	-2.993	17.384	1.00	43.93
18865	OE1	GLN	D	97	-106.611	-2.128	16.904	1.00	45.44
18866	NE2	GLN	D	97	-108.674	-2.818	17.509	1.00	43.75
18867	C	GLN	D	97	-107.045	-6.660	20.089	1.00	35.89
18868	O	GLN	D	97	-106.176	-7.333	20.644	1.00	34.79
18869	N	TRP	D	98	-107.872	-5.858	20.757	1.00	34.86
18870	CA	TRP	D	98	-107.759	-5.713	22.200	1.00	34.39
18871	CB	TRP	D	98	-107.954	-4.259	22.622	1.00	33.78
18872	CG	TRP	D	98	-107.147	-3.306	21.804	1.00	31.88
18873	CD1	TRP	D	98	-107.574	-2.115	21.269	1.00	29.98
18874	NE1	TRP	D	98	-106.553	-1.509	20.578	1.00	29.57
18875	CE2	TRP	D	98	-105.434	-2.303	20.655	1.00	30.00
18876	CD2	TRP	D	98	-105.776	-3.446	21.416	1.00	29.79
18877	CE3	TRP	D	98	-104.796	-4.421	21.632	1.00	29.20
18878	CZ3	TRP	D	98	-103.539	-4.238	21.089	1.00	28.94
18879	CH2	TRP	D	98	-103.232	-3.095	20.339	1.00	28.53
18880	CZ2	TRP	D	98	-104.167	-2.121	20.107	1.00	28.56
18881	C	TRP	D	98	-108.675	-6.669	22.964	1.00	34.42
18882	O	TRP	D	98	-108.842	-7.810	22.564	1.00	34.63
18883	N	ARG	D	99	-109.239	-6.229	24.076	1.00	34.58
18884	CA	ARG	D	99	-110.052	-7.129	24.888	1.00	34.95
18885	CB	ARG	D	99	-110.304	-6.549	26.278	1.00	34.75
18886	CG	ARG	D	99	-110.866	-7.562	27.244	1.00	35.56
18887	CD	ARG	D	99	-111.431	-6.975	28.536	1.00	37.79
18888	NE	ARG	D	99	-110.423	-6.374	29.400	1.00	38.21
18889	CZ	ARG	D	99	-109.616	-7.060	30.224	1.00	39.10
18890	NH1	ARG	D	99	-109.682	-8.383	30.263	1.00	37.89
18891	NH2	ARG	D	99	-108.736	-6.420	31.009	1.00	35.22
18892	C	ARG	D	99	-111.388	-7.497	24.267	1.00	35.24
18893	O	ARG	D	99	-111.866	-8.617	24.461	1.00	35.09
18894	N	HIS	D	100	-112.005	-6.549	23.561	1.00	35.52
18895	CA	HIS	D	100	-113.302	-6.797	22.928	1.00	36.27
18896	CB	HIS	D	100	-114.357	-5.800	23.427	1.00	36.19
18897	CG	HIS	D	100	-114.434	-5.688	24.915	1.00	36.00
18898	ND1	HIS	D	100	-115.035	-6.645	25.704	1.00	36.53
18899	CE1	HIS	D	100	-114.950	-6.282	26.973	1.00	35.21
18900	NE2	HIS	D	100	-114.307	-5.130	27.031	1.00	34.64
18901	CD2	HIS	D	100	-113.976	-4.736	25.760	1.00	34.03
18902	C	HIS	D	100	-113.184	-6.623	21.421	1.00	37.21
18903	O	HIS	D	100	-113.886	-7.279	20.650	1.00	36.96
18904	N	SER	D	101	-112.299	-5.710	21.025	1.00	38.32
18905	CA	SER	D	101	-112.084	-5.386	19.638	1.00	39.66
18906	CB	SER	D	101	-111.213	-4.137	19.477	1.00	39.82
18907	OG	SER	D	101	-110.019	-4.237	20.223	1.00	39.55
18908	C	SER	D	101	-111.464	-6.525	18.886	1.00	40.65
18909	O	SER	D	101	-110.700	-7.313	19.428	1.00	40.80
18910	N	TYR	D	102	-111.847	-6.594	17.621	1.00	42.09
18911	CA	TYR	D	102	-111.339	-7.556	16.677	1.00	43.32

FIGURE 3 NG

A	B	C	D	E	F	G	H	I	J
18912	CB	TYR	D	102	-111.758	-8.988	17.015	1.00	43.40
18913	CG	TYR	D	102	-113.246	-9.306	16.979	1.00	43.83
18914	CD1	TYR	D	102	-113.883	-9.621	15.780	1.00	44.25
18915	CE1	TYR	D	102	-115.236	-9.945	15.744	1.00	43.98
18916	CZ	TYR	D	102	-115.967	-9.973	16.922	1.00	44.41
18917	OH	TYR	D	102	-117.311	-10.301	16.887	1.00	43.54
18918	CE2	TYR	D	102	-115.351	-9.681	18.129	1.00	43.06
18919	CD2	TYR	D	102	-113.996	-9.358	18.151	1.00	43.54
18920	C	TYR	D	102	-111.796	-7.152	15.285	1.00	44.34
18921	O	TYR	D	102	-112.540	-6.185	15.093	1.00	43.86
18922	N	THR	D	103	-111.320	-7.907	14.317	1.00	45.77
18923	CA	THR	D	103	-111.582	-7.634	12.930	1.00	47.06
18924	CB	THR	D	103	-110.303	-7.059	12.321	1.00	47.16
18925	OG1	THR	D	103	-110.625	-6.135	11.278	1.00	47.95
18926	CG2	THR	D	103	-109.486	-8.139	11.646	1.00	47.43
18927	C	THR	D	103	-111.937	-8.981	12.336	1.00	47.65
18928	O	THR	D	103	-111.437	-10.007	12.796	1.00	47.29
18929	N	ALA	D	104	-112.835	-8.988	11.356	1.00	49.01
18930	CA	ALA	D	104	-113.252	-10.239	10.717	1.00	50.41
18931	CB	ALA	D	104	-114.139	-11.057	11.657	1.00	49.90
18932	C	ALA	D	104	-113.959	-10.039	9.377	1.00	51.59
18933	O	ALA	D	104	-114.330	-8.918	8.999	1.00	51.48
18934	N	SER	D	105	-114.118	-11.141	8.655	1.00	52.93
18935	CA	SER	D	105	-114.872	-11.131	7.414	1.00	54.56
18936	CB	SER	D	105	-114.257	-12.071	6.374	1.00	54.31
18937	OG	SER	D	105	-113.328	-11.387	5.553	1.00	54.83
18938	C	SER	D	105	-116.273	-11.591	7.763	1.00	55.67
18939	O	SER	D	105	-116.462	-12.339	8.729	1.00	55.62
18940	N	TYR	D	106	-117.247	-11.139	6.977	1.00	57.16
18941	CA	TYR	D	106	-118.649	-11.469	7.221	1.00	58.72
18942	CB	TYR	D	106	-119.347	-10.313	7.952	1.00	58.66
18943	CG	TYR	D	106	-118.833	-10.020	9.355	1.00	58.17
18944	CD1	TYR	D	106	-117.882	-9.029	9.584	1.00	57.42
18945	CE1	TYR	D	106	-117.422	-8.759	10.864	1.00	57.44
18946	CZ	TYR	D	106	-117.926	-9.485	11.925	1.00	57.96
18947	OH	TYR	D	106	-117.499	-9.248	13.211	1.00	57.93
18948	CE2	TYR	D	106	-118.870	-10.463	11.714	1.00	58.05
18949	CD2	TYR	D	106	-119.315	-10.723	10.443	1.00	57.40
18950	C	TYR	D	106	-119.430	-11.785	5.942	1.00	59.84
18951	O	TYR	D	106	-119.341	-11.074	4.942	1.00	59.99
18952	N	ASP	D	107	-120.195	-12.865	5.983	1.00	61.24
18953	CA	ASP	D	107	-121.074	-13.208	4.881	1.00	62.79
18954	CB	ASP	D	107	-120.627	-14.489	4.177	1.00	62.64
18955	CG	ASP	D	107	-119.475	-14.259	3.225	1.00	63.77
18956	OD1	ASP	D	107	-119.417	-13.167	2.614	1.00	64.55
18957	OD2	ASP	D	107	-118.575	-15.110	3.030	1.00	64.76
18958	C	ASP	D	107	-122.459	-13.388	5.467	1.00	63.71
18959	O	ASP	D	107	-122.614	-13.966	6.538	1.00	63.78
18960	N	ILE	D	108	-123.463	-12.866	4.778	1.00	65.01
18961	CA	ILE	D	108	-124.833	-13.012	5.233	1.00	66.28
18962	CB	ILE	D	108	-125.633	-11.744	4.919	1.00	66.20



FIGURE 3 NH

A	B	C	D	E	F	G	H	I	J
18963	CG1	ILE	D	108	-124.917	-10.522	5.487	1.00	65.90
18964	CD1	ILE	D	108	-125.322	-9.229	4.838	1.00	65.83
18965	CG2	ILE	D	108	-127.044	-11.853	5.467	1.00	66.26
18966	C	ILE	D	108	-125.450	-14.210	4.533	1.00	67.30
18967	O	ILE	D	108	-125.363	-14.334	3.318	1.00	67.32
18968	N	TYR	D	109	-126.053	-15.105	5.302	1.00	68.69
18969	CA	TYR	D	109	-126.697	-16.266	4.718	1.00	69.84
18970	CB	TYR	D	109	-126.303	-17.535	5.456	1.00	69.90
18971	CG	TYR	D	109	-127.208	-18.719	5.197	1.00	71.09
18972	CD1	TYR	D	109	-127.045	-19.519	4.071	1.00	71.85
18973	CE1	TYR	D	109	-127.871	-20.613	3.849	1.00	72.41
18974	CZ	TYR	D	109	-128.867	-20.912	4.761	1.00	72.30
18975	OH	TYR	D	109	-129.701	-21.990	4.565	1.00	73.12
18976	CE2	TYR	D	109	-129.040	-20.133	5.878	1.00	72.36
18977	CD2	TYR	D	109	-128.215	-19.049	6.091	1.00	71.87
18978	C	TYR	D	109	-128.195	-16.058	4.754	1.00	70.68
18979	O	TYR	D	109	-128.742	-15.532	5.725	1.00	70.66
18980	N	ASP	D	110	-128.852	-16.462	3.675	1.00	71.68
18981	CA	ASP	D	110	-130.283	-16.284	3.539	1.00	72.51
18982	CB	ASP	D	110	-130.622	-16.051	2.066	1.00	72.59
18983	CG	ASP	D	110	-131.776	-15.096	1.874	1.00	72.74
18984	OD1	ASP	D	110	-132.882	-15.387	2.377	1.00	72.74
18985	OD2	ASP	D	110	-131.667	-14.028	1.231	1.00	72.64
18986	C	ASP	D	110	-130.973	-17.541	4.032	1.00	73.04
18987	O	ASP	D	110	-130.631	-18.644	3.610	1.00	73.06
18988	N	LEU	D	111	-131.935	-17.387	4.935	1.00	73.76
18989	CA	LEU	D	111	-132.669	-18.549	5.415	1.00	74.52
18990	CB	LEU	D	111	-133.836	-18.139	6.306	1.00	74.64
18991	CG	LEU	D	111	-133.705	-18.587	7.761	1.00	74.93
18992	CD1	LEU	D	111	-134.969	-18.249	8.531	1.00	75.05
18993	CD2	LEU	D	111	-133.428	-20.093	7.815	1.00	75.00
18994	C	LEU	D	111	-133.193	-19.360	4.242	1.00	74.88
18995	O	LEU	D	111	-133.080	-20.590	4.220	1.00	74.88
18996	N	ASN	D	112	-133.743	-18.650	3.259	1.00	75.22
18997	CA	ASN	D	112	-134.343	-19.280	2.084	1.00	75.36
18998	CB	ASN	D	112	-135.066	-18.231	1.217	1.00	75.30
18999	CG	ASN	D	112	-134.287	-17.841	-0.031	1.00	75.30
19000	OD1	ASN	D	112	-133.863	-18.698	-0.807	1.00	76.06
19001	ND2	ASN	D	112	-134.131	-16.540	-0.249	1.00	74.06
19002	C	ASN	D	112	-133.389	-20.158	1.256	1.00	75.42
19003	O	ASN	D	112	-132.166	-20.069	1.381	1.00	75.54
19004	N	LEU	D	116	-127.026	-18.276	0.911	1.00	72.76
19005	CA	LEU	D	116	-125.797	-17.461	1.077	1.00	72.77
19006	CB	LEU	D	116	-124.547	-18.284	0.774	1.00	72.85
19007	CG	LEU	D	116	-123.241	-17.815	1.421	1.00	73.32
19008	CD1	LEU	D	116	-123.052	-18.509	2.758	1.00	73.79
19009	CD2	LEU	D	116	-122.045	-18.083	0.515	1.00	73.55
19010	C	LEU	D	116	-125.860	-16.283	0.131	1.00	72.74
19011	O	LEU	D	116	-126.359	-16.389	-0.987	1.00	72.77
19012	N	ILE	D	117	-125.354	-15.148	0.582	1.00	72.64
19013	CA	ILE	D	117	-125.358	-13.960	-0.251	1.00	72.25

FIGURE 3 NI

A	B	C	D	E	F	G	H	I	J
19014	CB	ILE	D	117	-125.816	-12.745	0.548	1.00	72.24
19015	CG1	ILE	D	117	-127.255	-12.953	1.012	1.00	72.43
19016	CD1	ILE	D	117	-127.974	-11.664	1.332	1.00	72.87
19017	CG2	ILE	D	117	-125.718	-11.486	-0.289	1.00	72.17
19018	C	ILE	D	117	-123.974	-13.761	-0.844	1.00	72.07
19019	O	ILE	D	117	-122.968	-14.129	-0.226	1.00	72.23
19020	N	THR	D	118	-123.934	-13.193	-2.049	1.00	71.58
19021	CA	THR	D	118	-122.689	-13.025	-2.789	1.00	71.02
19022	CB	THR	D	118	-122.687	-13.981	-3.968	1.00	71.07
19023	OG1	THR	D	118	-123.715	-13.584	-4.886	1.00	71.10
19024	CG2	THR	D	118	-123.124	-15.369	-3.517	1.00	71.27
19025	C	THR	D	118	-122.537	-11.615	-3.327	1.00	70.60
19026	O	THR	D	118	-121.457	-11.214	-3.762	1.00	70.73
19027	N	GLU	D	119	-123.626	-10.863	-3.303	1.00	69.83
19028	CA	GLU	D	119	-123.605	-9.515	-3.838	1.00	69.16
19029	CB	GLU	D	119	-124.845	-9.268	-4.699	1.00	69.35
19030	CG	GLU	D	119	-125.182	-7.797	-4.846	1.00	69.93
19031	CD	GLU	D	119	-125.356	-7.382	-6.290	1.00	70.41
19032	OE1	GLU	D	119	-126.374	-7.766	-6.908	1.00	69.96
19033	OE2	GLU	D	119	-124.467	-6.668	-6.801	1.00	70.62
19034	C	GLU	D	119	-123.471	-8.424	-2.779	1.00	68.55
19035	O	GLU	D	119	-124.180	-8.409	-1.770	1.00	68.12
19036	N	GLU	D	120	-122.546	-7.505	-3.031	1.00	67.97
19037	CA	GLU	D	120	-122.332	-6.389	-2.137	1.00	67.25
19038	CB	GLU	D	120	-123.639	-5.599	-2.023	1.00	67.27
19039	CG	GLU	D	120	-123.479	-4.091	-2.106	1.00	67.86
19040	CD	GLU	D	120	-122.505	-3.657	-3.187	1.00	68.83
19041	OE1	GLU	D	120	-122.954	-3.364	-4.314	1.00	69.63
19042	OE2	GLU	D	120	-121.287	-3.600	-2.904	1.00	68.90
19043	C	GLU	D	120	-121.867	-6.911	-0.771	1.00	66.58
19044	O	GLU	D	120	-122.200	-6.336	0.265	1.00	66.55
19045	N	ARG	D	121	-121.087	-7.994	-0.785	1.00	65.55
19046	CA	ARG	D	121	-120.622	-8.649	0.442	1.00	64.67
19047	CB	ARG	D	121	-119.613	-9.765	0.131	1.00	64.99
19048	CG	ARG	D	121	-120.208	-11.019	-0.472	1.00	65.62
19049	CD	ARG	D	121	-119.162	-12.018	-0.942	1.00	67.66
19050	NE	ARG	D	121	-118.595	-12.808	0.150	1.00	68.80
19051	CZ	ARG	D	121	-117.338	-13.233	0.188	1.00	70.07
19052	NH1	ARG	D	121	-116.508	-12.931	-0.800	1.00	70.63
19053	NH2	ARG	D	121	-116.907	-13.961	1.212	1.00	70.91
19054	C	ARG	D	121	-120.016	-7.676	1.446	1.00	63.70
19055	O	ARG	D	121	-119.550	-6.590	1.079	1.00	63.62
19056	N	ILE	D	122	-120.032	-8.069	2.719	1.00	62.24
19057	CA	ILE	D	122	-119.464	-7.225	3.767	1.00	60.81
19058	CB	ILE	D	122	-119.882	-7.716	5.169	1.00	60.82
19059	CG1	ILE	D	122	-121.350	-7.371	5.431	1.00	60.51
19060	CD1	ILE	D	122	-121.985	-8.143	6.584	1.00	60.01
19061	CG2	ILE	D	122	-119.035	-7.057	6.228	1.00	60.74
19062	C	ILE	D	122	-117.958	-7.232	3.603	1.00	59.48
19063	O	ILE	D	122	-117.360	-8.292	3.438	1.00	59.65
19064	N	PRO	D	123	-117.347	-6.054	3.636	1.00	58.43

FIGURE 3 NJ

A	B	C	D	E	F	G	H	I	J
19065	CA	PRO	D	123	-115.900	-5.925	3.424	1.00	57.67
19066	CB	PRO	D	123	-115.632	-4.443	3.697	1.00	57.56
19067	CG	PRO	D	123	-116.930	-3.768	3.545	1.00	57.74
19068	CD	PRO	D	123	-117.991	-4.759	3.907	1.00	58.33
19069	C	PRO	D	123	-115.091	-6.757	4.400	1.00	57.15
19070	O	PRO	D	123	-115.505	-6.943	5.543	1.00	56.86
19071	N	ASN	D	124	-113.954	-7.271	3.947	1.00	56.83
19072	CA	ASN	D	124	-113.045	-7.962	4.843	1.00	56.33
19073	CB	ASN	D	124	-111.920	-8.643	4.069	1.00	56.81
19074	CG	ASN	D	124	-112.432	-9.582	3.011	1.00	58.53
19075	OD1	ASN	D	124	-112.759	-10.738	3.295	1.00	58.70
19076	ND2	ASN	D	124	-112.509	-9.092	1.771	1.00	63.09
19077	C	ASN	D	124	-112.459	-6.898	5.750	1.00	55.47
19078	O	ASN	D	124	-112.560	-5.700	5.456	1.00	55.37
19079	N	ASN	D	125	-111.847	-7.330	6.847	1.00	54.44
19080	CA	ASN	D	125	-111.243	-6.405	7.793	1.00	53.40
19081	CB	ASN	D	125	-110.092	-5.644	7.128	1.00	53.69
19082	CG	ASN	D	125	-108.980	-6.576	6.639	1.00	54.78
19083	OD1	ASN	D	125	-108.700	-6.657	5.438	1.00	55.43
19084	ND2	ASN	D	125	-108.341	-7.284	7.574	1.00	55.14
19085	C	ASN	D	125	-112.278	-5.448	8.383	1.00	52.51
19086	O	ASN	D	125	-111.966	-4.307	8.731	1.00	52.05
19087	N	THR	D	126	-113.517	-5.920	8.482	1.00	51.47
19088	CA	THR	D	126	-114.582	-5.121	9.061	1.00	50.59
19089	CB	THR	D	126	-115.957	-5.638	8.610	1.00	50.76
19090	OG1	THR	D	126	-116.178	-5.246	7.242	1.00	51.43
19091	CG2	THR	D	126	-117.081	-4.929	9.371	1.00	49.95
19092	C	THR	D	126	-114.424	-5.106	10.585	1.00	50.03
19093	O	THR	D	126	-114.283	-6.148	11.227	1.00	49.49
19094	N	GLN	D	127	-114.438	-3.905	11.149	1.00	49.48
19095	CA	GLN	D	127	-114.150	-3.703	12.565	1.00	48.83
19096	CB	GLN	D	127	-113.690	-2.274	12.783	1.00	48.55
19097	CG	GLN	D	127	-112.395	-1.968	12.076	1.00	48.02
19098	CD	GLN	D	127	-112.246	-0.505	11.773	1.00	47.42
19099	OE1	GLN	D	127	-111.215	0.101	12.073	1.00	47.05
19100	NE2	GLN	D	127	-113.273	0.073	11.175	1.00	47.63
19101	C	GLN	D	127	-115.300	-4.025	13.497	1.00	48.68
19102	O	GLN	D	127	-115.085	-4.349	14.666	1.00	48.22
19103	N	TRP	D	128	-116.520	-3.943	12.985	1.00	48.58
19104	CA	TRP	D	128	-117.686	-4.236	13.804	1.00	48.57
19105	CB	TRP	D	128	-117.785	-3.224	14.941	1.00	48.61
19106	CG	TRP	D	128	-118.920	-3.469	15.859	1.00	48.73
19107	CD1	TRP	D	128	-120.091	-2.772	15.920	1.00	49.51
19108	NE1	TRP	D	128	-120.898	-3.293	16.903	1.00	50.23
19109	CE2	TRP	D	128	-120.251	-4.346	17.495	1.00	49.20
19110	CD2	TRP	D	128	-119.004	-4.483	16.861	1.00	49.16
19111	CE3	TRP	D	128	-118.146	-5.497	17.292	1.00	49.46
19112	C23	TRP	D	128	-118.550	-6.319	18.315	1.00	49.93
19113	CH2	TRP	D	128	-119.795	-6.157	18.922	1.00	49.45
19114	C22	TRP	D	128	-120.657	-5.176	18.528	1.00	49.26
19115	C	TRP	D	128	-118.967	-4.198	12.999	1.00	48.57

FIGURE 3 NK

A	B	C	D	E	F	G	H	I	J
19116	O	TRP	D	128	-119.195	-3.286	12.215	1.00	48.33
19117	N	VAL	D	129	-119.810	-5.195	13.193	1.00	49.01
19118	CA	VAL	D	129	-121.094	-5.208	12.515	1.00	49.67
19119	CB	VAL	D	129	-121.119	-6.213	11.356	1.00	49.72
19120	CG1	VAL	D	129	-120.447	-7.495	11.762	1.00	49.39
19121	CG2	VAL	D	129	-122.557	-6.454	10.889	1.00	49.71
19122	C	VAL	D	129	-122.209	-5.509	13.502	1.00	49.93
19123	O	VAL	D	129	-122.088	-6.404	14.337	1.00	49.80
19124	N	THR	D	130	-123.296	-4.754	13.395	1.00	50.50
19125	CA	THR	D	130	-124.420	-4.922	14.296	1.00	51.14
19126	CB	THR	D	130	-124.385	-3.833	15.364	1.00	51.17
19127	OG1	THR	D	130	-125.549	-3.945	16.191	1.00	51.18
19128	CG2	THR	D	130	-124.541	-2.472	14.713	1.00	51.04
19129	C	THR	D	130	-125.767	-4.868	13.589	1.00	51.70
19130	O	THR	D	130	-126.021	-3.986	12.766	1.00	51.85
19131	N	TRP	D	131	-126.628	-5.821	13.929	1.00	52.17
19132	CA	TRP	D	131	-127.992	-5.862	13.425	1.00	52.29
19133	CB	TRP	D	131	-128.630	-7.222	13.728	1.00	52.28
19134	CG	TRP	D	131	-128.260	-8.344	12.812	1.00	51.72
19135	CD1	TRP	D	131	-127.645	-9.507	13.156	1.00	52.54
19136	NE1	TRP	D	131	-127.487	-10.310	12.050	1.00	51.98
19137	CE2	TRP	D	131	-128.016	-9.670	10.961	1.00	51.62
19138	CD2	TRP	D	131	-128.521	-8.432	11.406	1.00	51.68
19139	CE3	TRP	D	131	-129.123	-7.582	10.469	1.00	50.91
19140	CZ3	TRP	D	131	-129.193	-7.988	9.150	1.00	50.91
19141	CH2	TRP	D	131	-128.684	-9.223	8.745	1.00	51.06
19142	CZ2	TRP	D	131	-128.094	-10.077	9.633	1.00	51.33
19143	C	TRP	D	131	-128.822	-4.804	14.133	1.00	52.55
19144	O	TRP	D	131	-128.423	-4.278	15.175	1.00	52.62
19145	N	SER	D	132	-129.975	-4.491	13.548	1.00	52.94
19146	CA	SER	D	132	-130.971	-3.617	14.152	1.00	52.94
19147	CB	SER	D	132	-132.122	-3.375	13.171	1.00	53.12
19148	OG	SER	D	132	-131.735	-2.586	12.071	1.00	53.77
19149	C	SER	D	132	-131.543	-4.395	15.317	1.00	52.84
19150	O	SER	D	132	-131.464	-5.620	15.336	1.00	52.63
19151	N	PRO	D	133	-132.139	-3.703	16.276	1.00	52.97
19152	CA	PRO	D	133	-132.754	-4.378	17.420	1.00	53.51
19153	CB	PRO	D	133	-133.206	-3.221	18.317	1.00	53.54
19154	CG	PRO	D	133	-132.435	-2.035	17.837	1.00	53.15
19155	CD	PRO	D	133	-132.264	-2.240	16.358	1.00	53.16
19156	C	PRO	D	133	-133.945	-5.193	16.933	1.00	54.07
19157	O	PRO	D	133	-134.241	-6.255	17.482	1.00	54.04
19158	N	VAL	D	134	-134.615	-4.681	15.901	1.00	54.63
19159	CA	VAL	D	134	-135.711	-5.383	15.241	1.00	54.97
19160	CB	VAL	D	134	-137.041	-4.623	15.383	1.00	55.20
19161	CG1	VAL	D	134	-137.425	-4.443	16.859	1.00	56.05
19162	CG2	VAL	D	134	-136.956	-3.278	14.683	1.00	55.03
19163	C	VAL	D	134	-135.406	-5.481	13.747	1.00	54.97
19164	O	VAL	D	134	-134.654	-4.676	13.208	1.00	54.98
19165	N	GLY	D	135	-135.988	-6.466	13.076	1.00	54.98
19166	CA	GLY	D	135	-135.831	-6.577	11.635	1.00	55.15

FIGURE 3 NL

A	B	C	D	E	F	G	H	I	J
19167	C	GLY	D	135	-134.533	-7.189	11.139	1.00	55.05
19168	O	GLY	D	135	-134.098	-8.238	11.632	1.00	55.19
19169	N	HIS	D	136	-133.922	-6.547	10.145	1.00	54.59
19170	CA	HIS	D	136	-132.689	-7.068	9.566	1.00	54.42
19171	CB	HIS	D	136	-132.984	-8.200	8.573	1.00	54.83
19172	CG	HIS	D	136	-133.761	-7.766	7.368	1.00	55.85
19173	ND1	HIS	D	136	-135.036	-8.217	7.107	1.00	56.99
19174	CE1	HIS	D	136	-135.472	-7.675	5.984	1.00	56.89
19175	NE2	HIS	D	136	-134.525	-6.890	5.505	1.00	57.44
19176	CD2	HIS	D	136	-133.443	-6.929	6.352	1.00	56.44
19177	C	HIS	D	136	-131.812	-6.014	8.903	1.00	53.87
19178	O	HIS	D	136	-131.034	-6.334	8.005	1.00	53.71
19179	N	LYS	D	137	-131.944	-4.763	9.327	1.00	53.46
19180	CA	LYS	D	137	-131.046	-3.721	8.848	1.00	53.39
19181	CB	LYS	D	137	-131.518	-2.345	9.298	1.00	53.41
19182	CG	LYS	D	137	-132.872	-1.994	8.752	1.00	53.27
19183	CD	LYS	D	137	-133.505	-0.854	9.498	1.00	53.95
19184	CE	LYS	D	137	-132.758	0.448	9.304	1.00	53.85
19185	NZ	LYS	D	137	-133.705	1.591	9.518	1.00	54.00
19186	C	LYS	D	137	-129.660	-4.031	9.407	1.00	53.29
19187	O	LYS	D	137	-129.525	-4.865	10.304	1.00	52.90
19188	N	LEU	D	138	-128.636	-3.363	8.885	1.00	53.28
19189	CA	LEU	D	138	-127.267	-3.692	9.262	1.00	53.28
19190	CB	LEU	D	138	-126.714	-4.705	8.252	1.00	53.54
19191	CG	LEU	D	138	-125.875	-5.902	8.701	1.00	54.30
19192	CD1	LEU	D	138	-126.255	-6.391	10.088	1.00	54.55
19193	CD2	LEU	D	138	-126.046	-7.019	7.695	1.00	55.20
19194	C	LEU	D	138	-126.366	-2.465	9.313	1.00	52.93
19195	O	LEU	D	138	-126.380	-1.644	8.404	1.00	53.28
19196	N	ALA	D	139	-125.600	-2.330	10.390	1.00	52.47
19197	CA	ALA	D	139	-124.610	-1.264	10.494	1.00	51.88
19198	CB	ALA	D	139	-124.991	-0.252	11.555	1.00	51.86
19199	C	ALA	D	139	-123.274	-1.913	10.820	1.00	51.49
19200	O	ALA	D	139	-123.201	-2.811	11.654	1.00	51.73
19201	N	TYR	D	140	-122.223	-1.481	10.139	1.00	50.77
19202	CA	TYR	D	140	-120.905	-2.043	10.367	1.00	50.11
19203	CB	TYR	D	140	-120.615	-3.162	9.362	1.00	50.32
19204	CG	TYR	D	140	-120.595	-2.693	7.924	1.00	51.56
19205	CD1	TYR	D	140	-119.491	-2.030	7.412	1.00	52.15
19206	CE1	TYR	D	140	-119.461	-1.595	6.108	1.00	52.91
19207	CZ	TYR	D	140	-120.546	-1.811	5.284	1.00	53.56
19208	OH	TYR	D	140	-120.493	-1.357	3.978	1.00	53.81
19209	CE2	TYR	D	140	-121.661	-2.471	5.765	1.00	52.68
19210	CD2	TYR	D	140	-121.683	-2.907	7.080	1.00	51.80
19211	C	TYR	D	140	-119.869	-0.938	10.271	1.00	49.24
19212	O	TYR	D	140	-120.156	0.137	9.750	1.00	49.17
19213	N	VAL	D	141	-118.676	-1.186	10.805	1.00	48.39
19214	CA	VAL	D	141	-117.602	-0.202	10.738	1.00	47.57
19215	CB	VAL	D	141	-117.171	0.300	12.142	1.00	47.62
19216	CG1	VAL	D	141	-118.347	0.930	12.868	1.00	46.94
19217	CG2	VAL	D	141	-116.027	1.311	12.041	1.00	47.46

FIGURE 3 NM

A	B	C	D	E	F	G	H	I	J
19218	C	VAL	D	141	-116.423	-0.792	9.976	1.00	47.21
19219	O	VAL	D	141	-116.019	-1.925	10.219	1.00	46.92
19220	N	TRP	D	142	-115.904	-0.025	9.024	1.00	46.99
19221	CA	TRP	D	142	-114.798	-0.466	8.190	1.00	46.91
19222	CB	TRP	D	142	-115.311	-1.002	6.859	1.00	47.22
19223	CG	TRP	D	142	-114.223	-1.473	5.930	1.00	48.90
19224	CD1	TRP	D	142	-113.537	-2.650	6.001	1.00	49.87
19225	NE1	TRP	D	142	-112.625	-2.732	4.976	1.00	50.83
19226	CE2	TRP	D	142	-112.712	-1.595	4.216	1.00	51.60
19227	CD2	TRP	D	142	-113.713	-0.783	4.786	1.00	49.90
19228	CE3	TRP	D	142	-113.993	0.450	4.186	1.00	51.17
19229	CZ3	TRP	D	142	-113.285	0.825	3.053	1.00	51.25
19230	CH2	TRP	D	142	-112.296	-0.004	2.513	1.00	52.35
19231	CZ2	TRP	D	142	-111.997	-1.218	3.073	1.00	52.69
19232	C	TRP	D	142	-113.885	0.725	7.981	1.00	46.62
19233	O	TRP	D	142	-114.353	1.822	7.653	1.00	46.66
19234	N	ASN	D	143	-112.591	0.514	8.200	1.00	46.03
19235	CA	ASN	D	143	-111.612	1.596	8.142	1.00	45.74
19236	CB	ASN	D	143	-111.260	1.978	6.700	1.00	46.35
19237	CG	ASN	D	143	-110.210	1.057	6.091	1.00	48.02
19238	OD1	ASN	D	143	-109.817	1.227	4.940	1.00	52.57
19239	ND2	ASN	D	143	-109.756	0.075	6.860	1.00	48.41
19240	C	ASN	D	143	-112.093	2.802	8.920	1.00	44.61
19241	O	ASN	D	143	-112.108	3.924	8.416	1.00	44.48
19242	N	ASN	D	144	-112.520	2.544	10.148	1.00	43.39
19243	CA	ASN	D	144	-112.984	3.596	11.046	1.00	42.57
19244	CB	ASN	D	144	-111.816	4.505	11.452	1.00	42.15
19245	CG	ASN	D	144	-110.758	3.772	12.268	1.00	40.44
19246	OD1	ASN	D	144	-109.975	4.389	12.977	1.00	39.55
19247	ND2	ASN	D	144	-110.742	2.453	12.174	1.00	38.08
19248	C	ASN	D	144	-114.173	4.423	10.544	1.00	42.38
19249	O	ASN	D	144	-114.345	5.577	10.952	1.00	42.50
19250	N	ASP	D	145	-114.984	3.845	9.663	1.00	41.79
19251	CA	ASP	D	145	-116.189	4.525	9.193	1.00	41.96
19252	CB	ASP	D	145	-116.037	5.058	7.772	1.00	41.95
19253	CG	ASP	D	145	-115.429	6.420	7.736	1.00	41.04
19254	OD1	ASP	D	145	-114.538	6.630	6.895	1.00	42.43
19255	OD2	ASP	D	145	-115.768	7.342	8.504	1.00	41.45
19256	C	ASP	D	145	-117.432	3.655	9.290	1.00	41.86
19257	O	ASP	D	145	-117.357	2.427	9.228	1.00	41.53
19258	N	ILE	D	146	-118.570	4.316	9.451	1.00	42.16
19259	CA	ILE	D	146	-119.843	3.638	9.641	1.00	43.35
19260	CB	ILE	D	146	-120.714	4.435	10.651	1.00	43.25
19261	CG1	ILE	D	146	-119.979	4.562	11.989	1.00	43.13
19262	CD1	ILE	D	146	-120.669	5.444	12.985	1.00	42.36
19263	CG2	ILE	D	146	-122.079	3.786	10.834	1.00	42.53
19264	C	ILE	D	146	-120.598	3.458	8.329	1.00	44.18
19265	O	ILE	D	146	-120.713	4.387	7.543	1.00	43.72
19266	N	TYR	D	147	-121.108	2.253	8.110	1.00	45.80
19267	CA	TYR	D	147	-121.886	1.946	6.919	1.00	47.62
19268	CB	TYR	D	147	-121.134	0.986	6.000	1.00	47.70

FIGURE 3 NN

A	B	C	D	E	F	G	H	I	J
19269	CG	TYR	D	147	-119.868	1.515	5.372	1.00	49.63
19270	CD1	TYR	D	147	-119.894	2.148	4.140	1.00	51.43
19271	CE1	TYR	D	147	-118.737	2.619	3.549	1.00	51.99
19272	CZ	TYR	D	147	-117.530	2.443	4.185	1.00	53.08
19273	OH	TYR	D	147	-116.372	2.912	3.605	1.00	54.67
19274	CE2	TYR	D	147	-117.473	1.802	5.404	1.00	52.35
19275	CD2	TYR	D	147	-118.638	1.340	5.989	1.00	50.98
19276	C	TYR	D	147	-123.210	1.285	7.309	1.00	48.25
19277	O	TYR	D	147	-123.256	0.458	8.224	1.00	48.03
19278	N	VAL	D	148	-124.277	1.623	6.592	1.00	49.17
19279	CA	VAL	D	148	-125.575	1.023	6.870	1.00	50.14
19280	CB	VAL	D	148	-126.579	2.060	7.410	1.00	50.11
19281	CG1	VAL	D	148	-127.927	1.416	7.638	1.00	49.82
19282	CG2	VAL	D	148	-126.068	2.679	8.707	1.00	49.73
19283	C	VAL	D	148	-126.199	0.339	5.662	1.00	51.12
19284	O	VAL	D	148	-126.381	0.959	4.613	1.00	51.21
19285	N	LYS	D	149	-126.504	-0.948	5.814	1.00	52.15
19286	CA	LYS	D	149	-127.238	-1.696	4.795	1.00	53.34
19287	CB	LYS	D	149	-126.630	-3.081	4.568	1.00	53.22
19288	CG	LYS	D	149	-125.433	-3.103	3.635	1.00	54.73
19289	CD	LYS	D	149	-125.032	-4.528	3.269	1.00	56.28
19290	CE	LYS	D	149	-124.096	-4.518	2.068	1.00	58.45
19291	NZ	LYS	D	149	-123.459	-3.167	1.889	1.00	59.46
19292	C	LYS	D	149	-128.681	-1.865	5.265	1.00	53.90
19293	O	LYS	D	149	-128.930	-2.407	6.348	1.00	54.32
19294	N	ILE	D	150	-129.638	-1.383	4.481	1.00	54.47
19295	CA	ILE	D	150	-131.030	-1.574	4.860	1.00	54.83
19296	CB	ILE	D	150	-131.948	-0.562	4.198	1.00	54.84
19297	CG1	ILE	D	150	-132.012	0.732	5.014	1.00	55.22
19298	CD1	ILE	D	150	-130.687	1.265	5.454	1.00	57.03
19299	CG2	ILE	D	150	-133.353	-1.140	4.117	1.00	54.79
19300	C	ILE	D	150	-131.438	-2.977	4.463	1.00	55.15
19301	O	ILE	D	150	-132.313	-3.587	5.084	1.00	55.26
19302	N	GLU	D	151	-130.771	-3.491	3.433	1.00	55.67
19303	CA	GLU	D	151	-131.050	-4.822	2.915	1.00	56.17
19304	CB	GLU	D	151	-131.914	-4.725	1.652	1.00	56.22
19305	CG	GLU	D	151	-133.279	-4.082	1.856	1.00	56.08
19306	CD	GLU	D	151	-134.211	-4.936	2.692	1.00	56.08
19307	OE1	GLU	D	151	-133.987	-6.160	2.756	1.00	56.09
19308	OE2	GLU	D	151	-135.167	-4.389	3.285	1.00	56.41
19309	C	GLU	D	151	-129.755	-5.558	2.595	1.00	56.55
19310	O	GLU	D	151	-128.898	-5.057	1.875	1.00	56.69
19311	N	PRO	D	152	-129.634	-6.771	3.104	1.00	57.10
19312	CA	PRO	D	152	-128.405	-7.556	2.956	1.00	57.89
19313	CB	PRO	D	152	-128.844	-8.953	3.382	1.00	57.70
19314	CG	PRO	D	152	-129.949	-8.704	4.339	1.00	57.44
19315	CD	PRO	D	152	-130.686	-7.500	3.830	1.00	57.04
19316	C	PRO	D	152	-127.846	-7.592	1.535	1.00	58.84
19317	O	PRO	D	152	-126.626	-7.619	1.365	1.00	59.09
19318	N	ASN	D	153	-128.720	-7.594	0.535	1.00	59.72
19319	CA	ASN	D	153	-128.285	-7.696	-0.852	1.00	60.60

FIGURE 3 NO

A	B	C	D	E	F	G	H	I	J
19320	CB	ASN	D	153	-129.319	-8.488	-1.666	1.00	60.74
19321	CG	ASN	D	153	-128.679	-9.390	-2.733	1.00	62.12
19322	OD1	ASN	D	153	-127.457	-9.598	-2.754	1.00	62.65
19323	ND2	ASN	D	153	-129.513	-9.935	-3.619	1.00	62.19
19324	C	ASN	D	153	-128.033	-6.338	-1.502	1.00	60.92
19325	O	ASN	D	153	-127.583	-6.269	-2.644	1.00	61.11
19326	N	LEU	D	154	-128.296	-5.261	-0.770	1.00	61.44
19327	CA	LEU	D	154	-128.196	-3.912	-1.337	1.00	61.99
19328	CB	LEU	D	154	-129.433	-3.093	-0.973	1.00	61.89
19329	CG	LEU	D	154	-130.733	-3.545	-1.639	1.00	62.88
19330	CD1	LEU	D	154	-130.479	-4.018	-3.071	1.00	63.19
19331	CD2	LEU	D	154	-131.773	-2.425	-1.603	1.00	63.11
19332	C	LEU	D	154	-126.936	-3.135	-0.963	1.00	62.40
19333	O	LEU	D	154	-126.287	-3.425	0.042	1.00	62.58
19334	N	PRO	D	155	-126.618	-2.129	-1.778	1.00	62.71
19335	CA	PRO	D	155	-125.437	-1.279	-1.585	1.00	62.86
19336	CB	PRO	D	155	-125.663	-0.153	-2.604	1.00	62.88
19337	CG	PRO	D	155	-127.126	-0.249	-2.911	1.00	62.68
19338	CD	PRO	D	155	-127.373	-1.721	-2.974	1.00	62.65
19339	C	PRO	D	155	-125.346	-0.684	-0.186	1.00	62.91
19340	O	PRO	D	155	-126.345	-0.600	0.528	1.00	62.98
19341	N	SER	D	156	-124.147	-0.239	0.176	1.00	62.87
19342	CA	SER	D	156	-123.904	0.301	1.501	1.00	62.90
19343	CB	SER	D	156	-122.579	-0.225	2.033	1.00	63.05
19344	OG	SER	D	156	-122.680	-0.457	3.420	1.00	64.11
19345	C	SER	D	156	-123.905	1.821	1.549	1.00	62.65
19346	O	SER	D	156	-123.365	2.493	0.667	1.00	62.59
19347	N	TYR	D	157	-124.506	2.369	2.598	1.00	62.27
19348	CA	TYR	D	157	-124.555	3.818	2.757	1.00	61.78
19349	CB	TYR	D	157	-125.901	4.267	3.317	1.00	62.14
19350	CG	TYR	D	157	-127.060	4.081	2.376	1.00	63.55
19351	CD1	TYR	D	157	-127.490	5.121	1.553	1.00	65.01
19352	CE1	TYR	D	157	-128.557	4.947	0.694	1.00	66.14
19353	CZ	TYR	D	157	-129.203	3.722	0.658	1.00	66.09
19354	OH	TYR	D	157	-130.268	3.516	-0.184	1.00	66.86
19355	CE2	TYR	D	157	-128.794	2.685	1.467	1.00	65.51
19356	CD2	TYR	D	157	-127.734	2.869	2.317	1.00	64.70
19357	C	TYR	D	157	-123.455	4.328	3.674	1.00	60.96
19358	O	TYR	D	157	-123.386	3.942	4.838	1.00	61.11
19359	N	ARG	D	158	-122.603	5.197	3.139	1.00	59.75
19360	CA	ARG	D	158	-121.532	5.802	3.911	1.00	58.41
19361	CB	ARG	D	158	-120.521	6.473	2.980	1.00	58.83
19362	CG	ARG	D	158	-119.328	5.616	2.557	1.00	59.53
19363	CD	ARG	D	158	-118.062	5.897	3.359	1.00	61.65
19364	NE	ARG	D	158	-116.839	5.483	2.675	1.00	62.55
19365	CZ	ARG	D	158	-115.660	6.077	2.844	1.00	63.50
19366	NH1	ARG	D	158	-115.539	7.100	3.684	1.00	62.39
19367	NH2	ARG	D	158	-114.597	5.643	2.182	1.00	64.32
19368	C	ARG	D	158	-122.132	6.852	4.826	1.00	57.27
19369	O	ARG	D	158	-122.639	7.883	4.352	1.00	56.83
19370	N	ILE	D	159	-122.099	6.590	6.131	1.00	55.59



FIGURE 3 NP

A	B	C	D	E	F	G	H	I	J
19371	CA	ILE	D	159	-122.573	7.572	7.084	1.00	53.90
19372	CB	ILE	D	159	-123.031	6.926	8.387	1.00	54.00
19373	CG1	ILE	D	159	-124.297	6.118	8.173	1.00	53.91
19374	CD1	ILE	D	159	-124.039	4.683	7.912	1.00	55.57
19375	CG2	ILE	D	159	-123.294	7.993	9.432	1.00	53.93
19376	C	ILE	D	159	-121.452	8.551	7.374	1.00	52.93
19377	O	ILE	D	159	-121.678	9.754	7.485	1.00	52.51
19378	N	THR	D	160	-120.235	8.034	7.504	1.00	52.05
19379	CA	THR	D	160	-119.096	8.894	7.824	1.00	51.01
19380	CB	THR	D	160	-118.529	8.603	9.246	1.00	50.81
19381	OG1	THR	D	160	-118.337	7.191	9.421	1.00	49.35
19382	CG2	THR	D	160	-119.545	8.970	10.293	1.00	50.05
19383	C	THR	D	160	-117.982	8.816	6.807	1.00	50.79
19384	O	THR	D	160	-117.764	7.787	6.175	1.00	50.59
19385	N	TRP	D	161	-117.265	9.920	6.692	1.00	51.02
19386	CA	TRP	D	161	-116.172	10.050	5.747	1.00	51.50
19387	CB	TRP	D	161	-116.579	11.048	4.656	1.00	51.88
19388	CG	TRP	D	161	-117.716	10.579	3.817	1.00	52.73
19389	CD1	TRP	D	161	-119.048	10.661	4.107	1.00	53.73
19390	NE1	TRP	D	161	-119.789	10.116	3.084	1.00	54.35
19391	CE2	TRP	D	161	-118.936	9.675	2.106	1.00	54.33
19392	CD2	TRP	D	161	-117.623	9.950	2.538	1.00	54.16
19393	CE3	TRP	D	161	-116.557	9.595	1.706	1.00	55.05
19394	CZ3	TRP	D	161	-116.828	8.983	0.501	1.00	55.45
19395	CH2	TRP	D	161	-118.142	8.721	0.102	1.00	55.33
19396	CZ2	TRP	D	161	-119.207	9.060	0.886	1.00	54.84
19397	C	TRP	D	161	-114.914	10.562	6.441	1.00	51.28
19398	O	TRP	D	161	-113.918	10.849	5.784	1.00	51.69
19399	N	THR	D	162	-114.960	10.675	7.765	1.00	50.76
19400	CA	THR	D	162	-113.838	11.225	8.523	1.00	50.57
19401	CB	THR	D	162	-114.353	12.097	9.699	1.00	50.82
19402	OG1	THR	D	162	-115.450	11.443	10.361	1.00	49.95
19403	CG2	THR	D	162	-114.983	13.397	9.165	1.00	51.04
19404	C	THR	D	162	-112.805	10.214	9.027	1.00	50.33
19405	O	THR	D	162	-111.738	10.605	9.473	1.00	50.51
19406	N	GLY	D	163	-113.111	8.925	8.933	1.00	50.05
19407	CA	GLY	D	163	-112.219	7.881	9.410	1.00	49.47
19408	C	GLY	D	163	-110.746	7.944	9.026	1.00	49.18
19409	O	GLY	D	163	-110.382	8.061	7.857	1.00	49.48
19410	N	LYS	D	164	-109.886	7.852	10.032	1.00	48.57
19411	CA	LYS	D	164	-108.447	7.826	9.815	1.00	47.59
19412	CB	LYS	D	164	-107.862	9.237	9.799	1.00	48.00
19413	CG	LYS	D	164	-106.443	9.303	9.252	1.00	48.18
19414	CD	LYS	D	164	-105.899	10.721	9.351	1.00	50.62
19415	CE	LYS	D	164	-104.506	10.842	8.722	1.00	51.69
19416	NZ	LYS	D	164	-103.882	12.164	9.030	1.00	52.29
19417	C	LYS	D	164	-107.802	6.989	10.909	1.00	46.77
19418	O	LYS	D	164	-107.955	7.280	12.098	1.00	46.34
19419	N	GLU	D	165	-107.088	5.949	10.482	1.00	45.96
19420	CA	GLU	D	165	-106.421	4.992	11.358	1.00	45.15
19421	CB	GLU	D	165	-105.426	4.156	10.550	1.00	45.79

FIGURE 3 NQ

A	B	C	D	E	F	G	H	I	J
19422	CG	GLU	D	165	-104.424	3.379	11.389	1.00	48.11
19423	CD	GLU	D	165	-103.887	2.158	10.660	1.00	50.89
19424	OE1	GLU	D	165	-103.038	2.325	9.751	1.00	52.11
19425	OE2	GLU	D	165	-104.324	1.033	10.990	1.00	50.88
19426	C	GLU	D	165	-105.723	5.672	12.520	1.00	43.98
19427	O	GLU	D	165	-104.946	6.603	12.313	1.00	43.28
19428	N	ASN	D	166	-106.035	5.215	13.738	1.00	42.69
19429	CA	ASN	D	166	-105.470	5.765	14.970	1.00	41.42
19430	CB	ASN	D	166	-103.945	5.589	15.006	1.00	41.08
19431	CG	ASN	D	166	-103.490	4.134	14.826	1.00	40.59
19432	OD1	ASN	D	166	-104.158	3.181	15.230	1.00	39.05
19433	ND2	ASN	D	166	-102.314	3.973	14.244	1.00	41.57
19434	C	ASN	D	166	-105.799	7.242	15.248	1.00	41.24
19435	O	ASN	D	166	-105.270	7.822	16.189	1.00	41.55
19436	N	ILE	D	167	-106.656	7.873	14.453	1.00	40.53
19437	CA	ILE	D	167	-106.919	9.300	14.680	1.00	39.73
19438	CB	ILE	D	167	-106.313	10.183	13.545	1.00	40.06
19439	CG1	ILE	D	167	-104.794	10.065	13.511	1.00	40.35
19440	CD1	ILE	D	167	-104.307	8.928	12.682	1.00	42.19
19441	CG2	ILE	D	167	-106.646	11.659	13.734	1.00	40.09
19442	C	ILE	D	167	-108.400	9.599	14.884	1.00	38.82
19443	O	ILE	D	167	-108.779	10.248	15.855	1.00	38.90
19444	N	ILE	D	168	-109.233	9.122	13.968	1.00	37.79
19445	CA	ILE	D	168	-110.668	9.321	14.060	1.00	36.40
19446	CB	ILE	D	168	-111.190	10.247	12.920	1.00	36.61
19447	CG1	ILE	D	168	-110.993	11.711	13.300	1.00	35.98
19448	CD1	ILE	D	168	-109.627	12.174	13.119	1.00	36.15
19449	CG2	ILE	D	168	-112.676	10.035	12.686	1.00	35.01
19450	C	ILE	D	168	-111.368	7.990	13.999	1.00	36.30
19451	O	ILE	D	168	-111.141	7.221	13.073	1.00	35.83
19452	N	TYR	D	169	-112.229	7.721	14.985	1.00	35.99
19453	CA	TYR	D	169	-112.982	6.471	15.026	1.00	35.20
19454	CB	TYR	D	169	-112.652	5.639	16.288	1.00	34.82
19455	CG	TYR	D	169	-111.196	5.355	16.631	1.00	32.44
19456	CD1	TYR	D	169	-110.329	6.378	17.005	1.00	31.54
19457	CE1	TYR	D	169	-109.019	6.126	17.342	1.00	28.27
19458	CZ	TYR	D	169	-108.549	4.839	17.324	1.00	30.04
19459	OH	TYR	D	169	-107.231	4.592	17.663	1.00	30.23
19460	CE2	TYR	D	169	-109.389	3.788	16.966	1.00	29.76
19461	CD2	TYR	D	169	-110.706	4.055	16.634	1.00	30.34
19462	C	TYR	D	169	-114.474	6.798	15.090	1.00	35.54
19463	O	TYR	D	169	-114.918	7.446	16.033	1.00	36.06
19464	N	ASN	D	170	-115.256	6.347	14.116	1.00	35.04
19465	CA	ASN	D	170	-116.698	6.540	14.183	1.00	34.53
19466	CB	ASN	D	170	-117.302	7.095	12.868	1.00	34.47
19467	CG	ASN	D	170	-116.540	8.269	12.308	1.00	33.96
19468	OD1	ASN	D	170	-115.718	8.100	11.415	1.00	36.18
19469	ND2	ASN	D	170	-116.806	9.466	12.822	1.00	32.81
19470	C	ASN	D	170	-117.309	5.185	14.426	1.00	34.53
19471	O	ASN	D	170	-117.001	4.220	13.719	1.00	34.47
19472	N	GLY	D	171	-118.192	5.099	15.406	1.00	34.24

FIGURE 3 NR

A	B	C	D	E	F	G	H	I	J
19473	CA	GLY	D	171	-118.867	3.844	15.650	1.00	33.95
19474	C	GLY	D	171	-118.020	2.800	16.328	1.00	33.67
19475	O	GLY	D	171	-118.525	1.738	16.662	1.00	33.71
19476	N	ILE	D	172	-116.734	3.074	16.512	1.00	33.28
19477	CA	ILE	D	172	-115.905	2.165	17.299	1.00	33.21
19478	CB	ILE	D	172	-115.021	1.258	16.435	1.00	33.11
19479	CG1	ILE	D	172	-114.167	2.086	15.480	1.00	33.64
19480	CD1	ILE	D	172	-113.038	1.297	14.870	1.00	33.35
19481	CG2	ILE	D	172	-115.857	0.212	15.707	1.00	32.71
19482	C	ILE	D	172	-115.065	2.935	18.305	1.00	32.77
19483	O	ILE	D	172	-114.861	4.138	18.168	1.00	33.08
19484	N	THR	D	173	-114.589	2.246	19.327	1.00	32.04
19485	CA	THR	D	173	-113.801	2.912	20.364	1.00	31.62
19486	CB	THR	D	173	-114.030	2.199	21.703	1.00	31.51
19487	OG1	THR	D	173	-113.962	0.781	21.506	1.00	28.76
19488	CG2	THR	D	173	-115.471	2.414	22.168	1.00	32.28
19489	C	THR	D	173	-112.312	2.926	20.076	1.00	31.35
19490	O	THR	D	173	-111.811	2.095	19.323	1.00	31.72
19491	N	ASP	D	174	-111.598	3.878	20.666	1.00	31.24
19492	CA	ASP	D	174	-110.140	3.835	20.639	1.00	30.80
19493	CB	ASP	D	174	-109.544	5.223	20.855	1.00	30.93
19494	CG	ASP	D	174	-109.758	5.732	22.268	1.00	31.81
19495	OD1	ASP	D	174	-109.046	6.675	22.701	1.00	32.93
19496	OD2	ASP	D	174	-110.608	5.229	23.028	1.00	32.28
19497	C	ASP	D	174	-109.736	2.887	21.786	1.00	30.67
19498	O	ASP	D	174	-110.598	2.265	22.415	1.00	30.57
19499	N	TRP	D	175	-108.449	2.770	22.077	1.00	29.77
19500	CA	TRP	D	175	-108.038	1.874	23.156	1.00	29.76
19501	CB	TRP	D	175	-106.501	1.832	23.324	1.00	28.86
19502	CG	TRP	D	175	-106.079	0.702	24.180	1.00	27.03
19503	CD1	TRP	D	175	-105.674	-0.533	23.762	1.00	26.23
19504	NE1	TRP	D	175	-105.372	-1.326	24.841	1.00	23.65
19505	CE2	TRP	D	175	-105.586	-0.613	25.990	1.00	24.67
19506	CD2	TRP	D	175	-106.044	0.669	25.609	1.00	24.92
19507	CE3	TRP	D	175	-106.352	1.593	26.614	1.00	24.73
19508	CZ3	TRP	D	175	-106.187	1.227	27.944	1.00	23.72
19509	CH2	TRP	D	175	-105.738	-0.057	28.292	1.00	23.52
19510	CZ2	TRP	D	175	-105.436	-0.993	27.331	1.00	24.29
19511	C	TRP	D	175	-108.700	2.130	24.524	1.00	29.64
19512	O	TRP	D	175	-109.288	1.214	25.112	1.00	29.33
19513	N	VAL	D	176	-108.585	3.351	25.047	1.00	29.99
19514	CA	VAL	D	176	-109.146	3.623	26.384	1.00	29.86
19515	CB	VAL	D	176	-108.826	5.014	26.946	1.00	30.01
19516	CG1	VAL	D	176	-108.403	5.962	25.878	1.00	30.79
19517	CG2	VAL	D	176	-107.824	4.921	28.065	1.00	29.46
19518	C	VAL	D	176	-110.646	3.519	26.503	1.00	29.80
19519	O	VAL	D	176	-111.170	3.202	27.582	1.00	30.14
19520	N	TYR	D	177	-111.359	3.828	25.434	1.00	29.56
19521	CA	TYR	D	177	-112.802	3.758	25.518	1.00	29.29
19522	CB	TYR	D	177	-113.455	4.559	24.402	1.00	29.80
19523	CG	TYR	D	177	-113.873	5.942	24.830	1.00	28.67

FIGURE 3 NS

A	B	C	D	E	F	G	H	I	J
19524	CD1	TYR	D	177	-112.994	6.999	24.757	1.00	28.83
19525	CE1	TYR	D	177	-113.377	8.265	25.148	1.00	28.90
19526	CZ	TYR	D	177	-114.655	8.478	25.621	1.00	28.47
19527	OH	TYR	D	177	-115.028	9.744	25.996	1.00	31.30
19528	CE2	TYR	D	177	-115.546	7.439	25.727	1.00	27.03
19529	CD2	TYR	D	177	-115.153	6.180	25.330	1.00	28.91
19530	C	TYR	D	177	-113.238	2.316	25.508	1.00	29.00
19531	O	TYR	D	177	-114.196	1.947	26.167	1.00	29.66
19532	N	GLU	D	178	-112.509	1.491	24.780	1.00	28.93
19533	CA	GLU	D	178	-112.802	0.073	24.745	1.00	28.98
19534	CB	GLU	D	178	-111.969	-0.641	23.673	1.00	28.58
19535	CG	GLU	D	178	-112.344	-2.112	23.565	1.00	28.40
19536	CD	GLU	D	178	-111.427	-2.912	22.672	1.00	30.67
19537	OE1	GLU	D	178	-111.338	-4.168	22.869	1.00	31.95
19538	OE2	GLU	D	178	-110.795	-2.297	21.779	1.00	30.39
19539	C	GLU	D	178	-112.558	-0.594	26.117	1.00	28.96
19540	O	GLU	D	178	-113.420	-1.282	26.652	1.00	28.96
19541	N	GLU	D	179	-111.377	-0.389	26.675	1.00	28.96
19542	CA	GLU	D	179	-111.020	-1.063	27.910	1.00	29.14
19543	CB	GLU	D	179	-109.493	-1.062	28.101	1.00	29.35
19544	CG	GLU	D	179	-109.017	-1.695	29.415	1.00	30.88
19545	CD	GLU	D	179	-109.394	-3.165	29.534	1.00	31.98
19546	OE1	GLU	D	179	-109.736	-3.805	28.508	1.00	32.59
19547	OE2	GLU	D	179	-109.349	-3.688	30.658	1.00	31.84
19548	C	GLU	D	179	-111.691	-0.511	29.161	1.00	29.26
19549	O	GLU	D	179	-112.152	-1.278	29.976	1.00	28.64
19550	N	GLU	D	180	-111.768	0.813	29.285	1.00	29.60
19551	CA	GLU	D	180	-112.125	1.441	30.556	1.00	30.72
19552	CB	GLU	D	180	-111.065	2.483	30.932	1.00	29.57
19553	CG	GLU	D	180	-109.648	1.973	30.883	1.00	30.51
19554	CD	GLU	D	180	-109.369	0.924	31.956	1.00	30.74
19555	OE1	GLU	D	180	-110.315	0.533	32.702	1.00	28.94
19556	OE2	GLU	D	180	-108.199	0.501	32.043	1.00	29.25
19557	C	GLU	D	180	-113.464	2.135	30.655	1.00	31.90
19558	O	GLU	D	180	-113.957	2.385	31.745	1.00	31.57
19559	N	VAL	D	181	-114.049	2.487	29.526	1.00	34.06
19560	CA	VAL	D	181	-115.288	3.228	29.590	1.00	35.25
19561	CB	VAL	D	181	-115.227	4.463	28.703	1.00	35.11
19562	CG1	VAL	D	181	-116.408	5.358	28.982	1.00	34.70
19563	CG2	VAL	D	181	-113.918	5.199	28.948	1.00	34.10
19564	C	VAL	D	181	-116.439	2.365	29.167	1.00	36.48
19565	O	VAL	D	181	-117.418	2.236	29.888	1.00	37.25
19566	N	PHE	D	182	-116.306	1.752	28.005	1.00	37.81
19567	CA	PHE	D	182	-117.401	0.997	27.435	1.00	38.93
19568	CB	PHE	D	182	-117.570	1.348	25.963	1.00	39.29
19569	CG	PHE	D	182	-118.052	2.736	25.727	1.00	40.33
19570	CD1	PHE	D	182	-118.630	3.458	26.737	1.00	43.17
19571	CE1	PHE	D	182	-119.087	4.740	26.514	1.00	44.23
19572	CZ	PHE	D	182	-118.965	5.303	25.271	1.00	43.23
19573	CE2	PHE	D	182	-118.396	4.594	24.259	1.00	43.26
19574	CD2	PHE	D	182	-117.944	3.315	24.485	1.00	42.22

# FIGURE 3 NT

A	B	C	D	E	F	G	H	I	J
19575	C	PHE	D	182	-117.213	-0.497	27.542	1.00	39.66
19576	O	PHE	D	182	-118.157	-1.242	27.312	1.00	40.63
19577	N	SER	D	183	-116.009	-0.957	27.874	1.00	39.53
19578	CA	SER	D	183	-115.806	-2.387	27.949	1.00	38.87
19579	CB	SER	D	183	-116.412	-2.979	29.227	1.00	39.11
19580	OG	SER	D	183	-115.868	-2.364	30.399	1.00	36.26
19581	C	SER	D	183	-116.473	-2.974	26.726	1.00	39.22
19582	O	SER	D	183	-117.203	-3.955	26.813	1.00	39.70
19583	N	ALA	D	184	-116.229	-2.342	25.582	1.00	39.15
19584	CA	ALA	D	184	-116.721	-2.815	24.301	1.00	39.26
19585	CB	ALA	D	184	-118.223	-2.687	24.212	1.00	39.44
19586	C	ALA	D	184	-116.065	-2.015	23.204	1.00	39.26
19587	O	ALA	D	184	-115.707	-0.859	23.403	1.00	39.65
19588	N	TYR	D	185	-115.883	-2.648	22.054	1.00	39.34
19589	CA	TYR	D	185	-115.337	-1.991	20.875	1.00	39.33
19590	CB	TYR	D	185	-114.984	-3.055	19.850	1.00	39.13
19591	CG	TYR	D	185	-114.116	-2.605	18.701	1.00	39.22
19592	CD1	TYR	D	185	-114.103	-3.319	17.518	1.00	38.30
19593	CE1	TYR	D	185	-113.312	-2.945	16.470	1.00	37.37
19594	CZ	TYR	D	185	-112.515	-1.853	16.578	1.00	37.94
19595	OH	TYR	D	185	-111.729	-1.523	15.503	1.00	41.08
19596	CE2	TYR	D	185	-112.496	-1.108	17.733	1.00	37.73
19597	CD2	TYR	D	185	-113.293	-1.492	18.800	1.00	38.47
19598	C	TYR	D	185	-116.402	-1.094	20.269	1.00	39.38
19599	O	TYR	D	185	-116.116	0.007	19.793	1.00	39.52
19600	N	SER	D	186	-117.637	-1.578	20.314	1.00	39.62
19601	CA	SER	D	186	-118.770	-0.920	19.673	1.00	40.05
19602	CB	SER	D	186	-120.014	-1.793	19.756	1.00	40.06
19603	OG	SER	D	186	-121.065	-1.176	19.036	1.00	42.12
19604	C	SER	D	186	-119.124	0.420	20.248	1.00	39.96
19605	O	SER	D	186	-119.230	0.583	21.462	1.00	40.18
19606	N	ALA	D	187	-119.322	1.383	19.361	1.00	40.02
19607	CA	ALA	D	187	-119.751	2.714	19.765	1.00	39.89
19608	CB	ALA	D	187	-118.604	3.695	19.672	1.00	39.01
19609	C	ALA	D	187	-120.923	3.121	18.872	1.00	39.75
19610	O	ALA	D	187	-121.025	4.254	18.422	1.00	39.42
19611	N	LEU	D	188	-121.800	2.156	18.626	1.00	40.42
19612	CA	LEU	D	188	-122.968	2.331	17.777	1.00	41.23
19613	CB	LEU	D	188	-122.858	1.421	16.543	1.00	41.42
19614	CG	LEU	D	188	-122.038	2.006	15.406	1.00	41.93
19615	CD1	LEU	D	188	-122.343	1.318	14.081	1.00	40.35
19616	CD2	LEU	D	188	-122.372	3.476	15.346	1.00	42.22
19617	C	LEU	D	188	-124.226	1.965	18.545	1.00	41.55
19618	O	LEU	D	188	-124.309	0.880	19.133	1.00	41.55
19619	N	TRP	D	189	-125.215	2.846	18.516	1.00	41.91
19620	CA	TRP	D	189	-126.449	2.589	19.246	1.00	43.18
19621	CB	TRP	D	189	-126.504	3.439	20.524	1.00	42.79
19622	CG	TRP	D	189	-125.345	3.180	21.435	1.00	43.11
19623	CD1	TRP	D	189	-125.248	2.200	22.380	1.00	42.61
19624	NE1	TRP	D	189	-124.030	2.272	23.010	1.00	42.77
19625	CE2	TRP	D	189	-123.309	3.302	22.466	1.00	42.51

FIGURE 3 NU

A	B	C	D	E	F	G	H	I	J
19626	CD2	TRP	D	189	-124.106	3.894	21.471	1.00	41.74
19627	CH3	TRP	D	189	-123.589	4.981	20.760	1.00	40.87
19628	CZ3	TRP	D	189	-122.332	5.433	21.058	1.00	40.77
19629	CH2	TRP	D	189	-121.559	4.823	22.049	1.00	41.77
19630	CZ2	TRP	D	189	-122.031	3.755	22.765	1.00	41.90
19631	C	TRP	D	189	-127.721	2.791	18.414	1.00	43.78
19632	O	TRP	D	189	-128.164	3.915	18.201	1.00	43.52
19633	N	TRP	D	190	-128.287	1.677	17.959	1.00	44.99
19634	CA	TRP	D	190	-129.548	1.665	17.226	1.00	46.13
19635	CB	TRP	D	190	-129.875	0.247	16.747	1.00	45.99
19636	CG	TRP	D	190	-129.246	-0.242	15.478	1.00	47.26
19637	CD1	TRP	D	190	-128.410	-1.317	15.343	1.00	47.79
19638	NE1	TRP	D	190	-128.060	-1.484	14.026	1.00	47.56
19639	CE2	TRP	D	190	-128.686	-0.526	13.277	1.00	47.82
19640	CD2	TRP	D	190	-129.448	0.268	14.158	1.00	47.61
19641	CE3	TRP	D	190	-130.185	1.325	13.628	1.00	49.11
19642	CZ3	TRP	D	190	-130.143	1.549	12.265	1.00	49.94
19643	CH2	TRP	D	190	-129.380	0.740	11.421	1.00	49.15
19644	CZ2	TRP	D	190	-128.644	-0.297	11.908	1.00	48.54
19645	C	TRP	D	190	-130.686	2.039	18.164	1.00	46.49
19646	O	TRP	D	190	-130.698	1.639	19.328	1.00	46.91
19647	N	SER	D	191	-131.658	2.783	17.651	1.00	46.78
19648	CA	SER	D	191	-132.861	3.051	18.416	1.00	46.91
19649	CB	SER	D	191	-133.702	4.149	17.760	1.00	46.85
19650	OG	SER	D	191	-134.208	3.721	16.508	1.00	46.27
19651	C	SER	D	191	-133.599	1.713	18.449	1.00	47.19
19652	O	SER	D	191	-133.267	0.796	17.695	1.00	47.05
19653	N	PRO	D	192	-134.572	1.583	19.337	1.00	47.51
19654	CA	PRO	D	192	-135.280	0.313	19.522	1.00	48.10
19655	CB	PRO	D	192	-136.323	0.656	20.582	1.00	48.31
19656	CG	PRO	D	192	-135.743	1.822	21.306	1.00	47.57
19657	CD	PRO	D	192	-135.040	2.627	20.261	1.00	47.53
19658	C	PRO	D	192	-135.948	-0.272	18.268	1.00	49.00
19659	O	PRO	D	192	-136.024	-1.498	18.146	1.00	48.81
19660	N	ASN	D	193	-136.422	0.563	17.350	1.00	49.60
19661	CA	ASN	D	193	-137.098	0.006	16.185	1.00	50.51
19662	CB	ASN	D	193	-138.478	0.636	15.970	1.00	51.04
19663	CG	ASN	D	193	-138.438	1.863	15.094	1.00	53.09
19664	OD1	ASN	D	193	-137.624	1.966	14.176	1.00	55.03
19665	ND2	ASN	D	193	-139.347	2.795	15.355	1.00	57.82
19666	C	ASN	D	193	-136.253	0.027	14.920	1.00	50.46
19667	O	ASN	D	193	-136.710	-0.364	13.843	1.00	50.56
19668	N	GLY	D	194	-135.018	0.495	15.056	1.00	49.91
19669	CA	GLY	D	194	-134.109	0.520	13.931	1.00	49.23
19670	C	GLY	D	194	-134.142	1.811	13.145	1.00	48.71
19671	O	GLY	D	194	-133.450	1.945	12.141	1.00	48.79
19672	N	THR	D	195	-134.929	2.773	13.601	1.00	48.01
19673	CA	THR	D	195	-135.044	4.026	12.874	1.00	47.27
19674	CB	THR	D	195	-136.232	4.839	13.394	1.00	47.08
19675	OG1	THR	D	195	-137.433	4.309	12.830	1.00	48.15
19676	CG2	THR	D	195	-136.196	6.249	12.852	1.00	46.07

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**FIGURE 3 NV**

A	B	C	D	E	F	G	H	I	J
19677	C	THR	D	195	-133.760	4.845	12.909	1.00	46.80
19678	O	THR	D	195	-133.205	5.191	11.863	1.00	46.65
19679	N	PHE	D	196	-133.293	5.163	14.109	1.00	46.15
19680	CA	PHE	D	196	-132.081	5.956	14.240	1.00	45.58
19681	CB	PHE	D	196	-132.231	7.004	15.336	1.00	46.02
19682	CG	PHE	D	196	-133.336	7.998	15.097	1.00	46.92
19683	CD1	PHE	D	196	-133.112	9.140	14.349	1.00	47.46
19684	CE1	PHE	D	196	-134.129	10.070	14.155	1.00	48.60
19685	CZ	PHE	D	196	-135.372	9.861	14.712	1.00	47.47
19686	CE2	PHE	D	196	-135.602	8.732	15.460	1.00	48.00
19687	CD2	PHE	D	196	-134.586	7.807	15.655	1.00	47.89
19688	C	PHE	D	196	-130.871	5.106	14.559	1.00	44.71
19689	O	PHE	D	196	-130.977	4.020	15.132	1.00	44.70
19690	N	LEU	D	197	-129.710	5.607	14.173	1.00	43.96
19691	CA	LEU	D	197	-128.456	4.965	14.515	1.00	42.62
19692	CB	LEU	D	197	-127.728	4.458	13.286	1.00	42.73
19693	CG	LEU	D	197	-126.345	3.877	13.547	1.00	42.17
19694	CD1	LEU	D	197	-125.787	3.269	12.290	1.00	42.13
19695	CD2	LEU	D	197	-126.392	2.829	14.644	1.00	43.28
19696	C	LEU	D	197	-127.661	6.061	15.137	1.00	42.15
19697	O	LEU	D	197	-127.332	7.040	14.475	1.00	41.99
19698	N	ALA	D	198	-127.394	5.933	16.428	1.00	41.38
19699	CA	ALA	D	198	-126.609	6.934	17.113	1.00	40.24
19700	CB	ALA	D	198	-127.203	7.248	18.468	1.00	40.45
19701	C	ALA	D	198	-125.245	6.319	17.251	1.00	39.57
19702	O	ALA	D	198	-125.113	5.104	17.350	1.00	39.36
19703	N	TYR	D	199	-124.221	7.148	17.240	1.00	38.64
19704	CA	TYR	D	199	-122.880	6.618	17.341	1.00	38.12
19705	CB	TYR	D	199	-122.369	6.224	15.951	1.00	38.38
19706	CG	TYR	D	199	-122.292	7.377	14.963	1.00	38.47
19707	CD1	TYR	D	199	-121.131	8.132	14.842	1.00	37.96
19708	CE1	TYR	D	199	-121.046	9.172	13.924	1.00	39.86
19709	CZ	TYR	D	199	-122.140	9.480	13.115	1.00	40.01
19710	OH	TYR	D	199	-122.045	10.525	12.210	1.00	39.99
19711	CE2	TYR	D	199	-123.298	8.736	13.209	1.00	38.52
19712	CD2	TYR	D	199	-123.370	7.689	14.130	1.00	39.04
19713	C	TYR	D	199	-121.994	7.667	17.964	1.00	37.29
19714	O	TYR	D	199	-122.393	8.820	18.089	1.00	37.12
19715	N	ALA	D	200	-120.800	7.262	18.374	1.00	36.49
19716	CA	ALA	D	200	-119.840	8.204	18.920	1.00	35.72
19717	CB	ALA	D	200	-119.360	7.752	20.284	1.00	35.51
19718	C	ALA	D	200	-118.675	8.257	17.955	1.00	35.40
19719	O	ALA	D	200	-118.445	7.308	17.211	1.00	35.07
19720	N	GLN	D	201	-117.948	9.365	17.967	1.00	34.67
19721	CA	GLN	D	201	-116.767	9.482	17.150	1.00	34.64
19722	CB	GLN	D	201	-116.972	10.478	16.018	1.00	34.58
19723	CG	GLN	D	201	-115.677	11.025	15.456	1.00	34.47
19724	CD	GLN	D	201	-115.919	12.212	14.546	1.00	35.82
19725	OE1	GLN	D	201	-115.841	13.357	14.987	1.00	36.79
19726	NE2	GLN	D	201	-116.238	11.944	13.287	1.00	32.06
19727	C	GLN	D	201	-115.637	9.957	18.033	1.00	34.24

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FIGURE 3 NW

A	B	C	D	E	F	G	H	I	J
19728	O	GLN	D	201	-115.740	10.998	18.670	1.00	34.35
19729	N	PHE	D	202	-114.553	9.202	18.070	1.00	33.60
19730	CA	PHE	D	202	-113.443	9.606	18.916	1.00	33.94
19731	CB	PHE	D	202	-113.003	8.450	19.835	1.00	33.79
19732	CG	PHE	D	202	-114.159	7.783	20.547	1.00	33.26
19733	CD1	PHE	D	202	-114.561	8.211	21.806	1.00	33.46
19734	CE1	PHE	D	202	-115.625	7.630	22.444	1.00	32.35
19735	CZ	PHE	D	202	-116.325	6.618	21.833	1.00	33.18
19736	CE2	PHE	D	202	-115.952	6.193	20.566	1.00	33.55
19737	CD2	PHE	D	202	-114.873	6.776	19.934	1.00	32.40
19738	C	PHE	D	202	-112.299	10.170	18.095	1.00	33.79
19739	O	PHE	D	202	-112.011	9.726	16.993	1.00	32.93
19740	N	ASN	D	203	-111.673	11.186	18.656	1.00	34.99
19741	CA	ASN	D	203	-110.561	11.860	18.023	1.00	35.89
19742	CB	ASN	D	203	-110.922	13.334	17.871	1.00	36.02
19743	CG	ASN	D	203	-109.938	14.088	17.025	1.00	37.77
19744	OD1	ASN	D	203	-108.770	13.721	16.933	1.00	38.31
19745	ND2	ASN	D	203	-110.403	15.162	16.400	1.00	43.95
19746	C	ASN	D	203	-109.300	11.704	18.879	1.00	36.16
19747	O	ASN	D	203	-109.211	12.277	19.966	1.00	36.27
19748	N	ASP	D	204	-108.327	10.944	18.382	1.00	36.54
19749	CA	ASP	D	204	-107.086	10.710	19.106	1.00	37.36
19750	CB	ASP	D	204	-106.746	9.215	19.127	1.00	37.61
19751	CG	ASP	D	204	-107.684	8.421	20.006	1.00	37.75
19752	OD1	ASP	D	204	-108.911	8.614	19.878	1.00	38.80
19753	OD2	ASP	D	204	-107.293	7.582	20.842	1.00	36.60
19754	C	ASP	D	204	-105.903	11.467	18.532	1.00	37.87
19755	O	ASP	D	204	-104.751	11.155	18.835	1.00	38.21
19756	N	THR	D	205	-106.164	12.464	17.707	1.00	38.14
19757	CA	THR	D	205	-105.053	13.195	17.097	1.00	38.26
19758	CB	THR	D	205	-105.506	14.549	16.520	1.00	38.05
19759	OG1	THR	D	205	-106.361	14.327	15.393	1.00	39.01
19760	CG2	THR	D	205	-104.314	15.265	15.918	1.00	37.32
19761	C	THR	D	205	-103.852	13.418	18.019	1.00	38.03
19762	O	THR	D	205	-102.714	13.100	17.660	1.00	37.78
19763	N	GLU	D	206	-104.087	13.997	19.188	1.00	37.62
19764	CA	GLU	D	206	-102.953	14.292	20.059	1.00	37.50
19765	CB	GLU	D	206	-103.048	15.711	20.608	1.00	38.21
19766	CG	GLU	D	206	-102.484	16.761	19.670	1.00	41.63
19767	CD	GLU	D	206	-102.929	18.150	20.052	1.00	45.92
19768	OE1	GLU	D	206	-102.040	18.998	20.322	1.00	48.17
19769	OE2	GLU	D	206	-104.166	18.381	20.093	1.00	46.94
19770	C	GLU	D	206	-102.711	13.313	21.208	1.00	36.08
19771	O	GLU	D	206	-101.979	13.617	22.142	1.00	35.60
19772	N	VAL	D	207	-103.313	12.142	21.177	1.00	34.78
19773	CA	VAL	D	207	-102.956	11.236	22.252	1.00	34.13
19774	CB	VAL	D	207	-104.118	10.309	22.686	1.00	34.28
19775	CG1	VAL	D	207	-103.765	8.857	22.537	1.00	34.90
19776	CG2	VAL	D	207	-105.406	10.705	21.988	1.00	34.08
19777	C	VAL	D	207	-101.638	10.519	21.923	1.00	32.63
19778	O	VAL	D	207	-101.434	10.002	20.822	1.00	31.99



FIGURE 3 NX

A	B	C	D	E	F	G	H	I	J
19779	N	PRO	D	208	-100.712	10.557	22.867	1.00	31.85
19780	CA	PRO	D	208	-99.409	9.936	22.650	1.00	31.33
19781	CB	PRO	D	208	-98.680	10.182	23.966	1.00	31.40
19782	CG	PRO	D	208	-99.388	11.391	24.576	1.00	31.21
19783	CD	PRO	D	208	-100.832	11.187	24.199	1.00	31.62
19784	C	PRO	D	208	-99.597	8.456	22.371	1.00	31.19
19785	O	PRO	D	208	-100.636	7.883	22.720	1.00	31.26
19786	N	LEU	D	209	-98.629	7.847	21.703	1.00	30.84
19787	CA	LEU	D	209	-98.740	6.426	21.395	1.00	30.98
19788	CB	LEU	D	209	-98.521	6.159	19.891	1.00	31.17
19789	CG	LEU	D	209	-99.343	6.966	18.873	1.00	31.32
19790	CD1	LEU	D	209	-100.116	6.064	17.943	1.00	32.28
19791	CD2	LEU	D	209	-98.445	7.864	18.085	1.00	33.81
19792	C	LEU	D	209	-97.782	5.581	22.239	1.00	30.34
19793	O	LEU	D	209	-96.652	5.996	22.519	1.00	31.03
19794	N	ILE	D	210	-98.248	4.420	22.683	1.00	29.33
19795	CA	ILE	D	210	-97.363	3.504	23.391	1.00	28.55
19796	CB	ILE	D	210	-98.128	2.609	24.366	1.00	27.87
19797	CG1	ILE	D	210	-97.194	1.600	25.046	1.00	26.81
19798	CD1	ILE	D	210	-95.991	2.195	25.727	1.00	25.03
19799	CG2	ILE	D	210	-99.226	1.859	23.631	1.00	28.10
19800	C	ILE	D	210	-96.771	2.678	22.291	1.00	28.18
19801	O	ILE	D	210	-97.500	2.229	21.427	1.00	27.53
19802	N	GLU	D	211	-95.449	2.532	22.289	1.00	28.37
19803	CA	GLU	D	211	-94.792	1.697	21.298	1.00	28.97
19804	CB	GLU	D	211	-93.779	2.484	20.445	1.00	29.20
19805	CG	GLU	D	211	-94.073	3.960	20.253	1.00	31.46
19806	CD	GLU	D	211	-93.308	4.564	19.080	1.00	34.06
19807	OE1	GLU	D	211	-93.946	5.132	18.183	1.00	37.28
19808	OE2	GLU	D	211	-92.070	4.492	19.045	1.00	35.21
19809	C	GLU	D	211	-94.058	0.559	21.997	1.00	28.84
19810	O	GLU	D	211	-93.430	0.752	23.040	1.00	28.04
19811	N	TYR	D	212	-94.121	-0.620	21.395	1.00	28.90
19812	CA	TYR	D	212	-93.392	-1.767	21.893	1.00	29.35
19813	CB	TYR	D	212	-94.152	-2.481	23.018	1.00	29.57
19814	CG	TYR	D	212	-95.564	-2.794	22.675	1.00	28.88
19815	CD1	TYR	D	212	-95.896	-3.972	22.027	1.00	29.65
19816	CE1	TYR	D	212	-97.200	-4.258	21.706	1.00	28.84
19817	CZ	TYR	D	212	-98.188	-3.353	22.015	1.00	28.00
19818	OH	TYR	D	212	-99.501	-3.630	21.698	1.00	28.52
19819	CE2	TYR	D	212	-97.879	-2.177	22.645	1.00	28.71
19820	CD2	TYR	D	212	-96.572	-1.900	22.971	1.00	29.20
19821	C	TYR	D	212	-93.124	-2.709	20.757	1.00	29.59
19822	O	TYR	D	212	-93.786	-2.661	19.707	1.00	30.24
19823	N	SER	D	213	-92.138	-3.567	20.961	1.00	29.61
19824	CA	SER	D	213	-91.752	-4.527	19.948	1.00	29.47
19825	CB	SER	D	213	-90.337	-5.027	20.203	1.00	28.66
19826	OG	SER	D	213	-89.418	-3.945	20.118	1.00	29.20
19827	C	SER	D	213	-92.709	-5.699	19.880	1.00	29.72
19828	O	SER	D	213	-93.221	-6.148	20.900	1.00	30.07
19829	N	PHE	D	214	-92.977	-6.155	18.661	1.00	29.60

FIGURE 3 NY

A	B	C	D	E	F	G	H	I	J
19830	CA	PHE	D	214	-93.727	-7.379	18.445	1.00	30.26
19831	CB	PHE	D	214	-95.054	-7.141	17.751	1.00	30.16
19832	CG	PHE	D	214	-95.995	-8.303	17.869	1.00	31.47
19833	CD1	PHE	D	214	-96.002	-9.301	16.913	1.00	30.09
19834	CE1	PHE	D	214	-96.836	-10.358	17.020	1.00	29.10
19835	CZ	PHE	D	214	-97.692	-10.464	18.089	1.00	29.87
19836	CE2	PHE	D	214	-97.703	-9.494	19.051	1.00	31.23
19837	CD2	PHE	D	214	-96.854	-8.414	18.949	1.00	31.10
19838	C	PHE	D	214	-92.831	-8.263	17.597	1.00	30.20
19839	O	PHE	D	214	-92.446	-7.891	16.490	1.00	30.05
19840	N	TYR	D	215	-92.509	-9.437	18.121	1.00	30.18
19841	CA	TYR	D	215	-91.502	-10.275	17.501	1.00	30.12
19842	CB	TYR	D	215	-90.724	-11.052	18.578	1.00	29.28
19843	CG	TYR	D	215	-90.102	-10.062	19.523	1.00	27.33
19844	CD1	TYR	D	215	-90.713	-9.748	20.732	1.00	23.82
19845	CE1	TYR	D	215	-90.170	-8.828	21.567	1.00	22.15
19846	CZ	TYR	D	215	-89.009	-8.176	21.207	1.00	22.23
19847	OH	TYR	D	215	-88.487	-7.237	22.038	1.00	21.18
19848	CE2	TYR	D	215	-88.391	-8.440	20.010	1.00	22.82
19849	CD2	TYR	D	215	-88.950	-9.378	19.170	1.00	25.51
19850	C	TYR	D	215	-92.036	-11.136	16.387	1.00	31.07
19851	O	TYR	D	215	-91.324	-11.411	15.414	1.00	31.32
19852	N	SER	D	216	-93.290	-11.542	16.534	1.00	32.24
19853	CA	SER	D	216	-93.977	-12.331	15.523	1.00	33.25
19854	CB	SER	D	216	-93.906	-11.654	14.144	1.00	33.12
19855	OG	SER	D	216	-94.802	-12.287	13.238	1.00	32.97
19856	C	SER	D	216	-93.357	-13.704	15.449	1.00	33.82
19857	O	SER	D	216	-92.623	-14.108	16.353	1.00	33.58
19858	N	ASP	D	217	-93.659	-14.408	14.362	1.00	34.88
19859	CA	ASP	D	217	-93.144	-15.744	14.128	1.00	35.87
19860	CB	ASP	D	217	-93.836	-16.411	12.919	1.00	36.72
19861	CG	ASP	D	217	-95.301	-16.822	13.222	1.00	40.47
19862	OD1	ASP	D	217	-95.515	-17.742	14.060	1.00	42.47
19863	OD2	ASP	D	217	-96.298	-16.280	12.670	1.00	42.44
19864	C	ASP	D	217	-91.658	-15.623	13.886	1.00	36.06
19865	O	ASP	D	217	-91.157	-14.561	13.516	1.00	36.00
19866	N	GLU	D	218	-90.956	-16.722	14.104	1.00	36.36
19867	CA	GLU	D	218	-89.523	-16.775	13.912	1.00	36.81
19868	CB	GLU	D	218	-89.059	-18.214	14.114	1.00	37.14
19869	CG	GLU	D	218	-87.604	-18.453	13.807	1.00	40.56
19870	CD	GLU	D	218	-87.200	-19.893	14.038	1.00	44.21
19871	OE1	GLU	D	218	-86.058	-20.230	13.649	1.00	45.99
19872	OE2	GLU	D	218	-88.015	-20.676	14.601	1.00	43.55
19873	C	GLU	D	218	-89.096	-16.244	12.539	1.00	36.39
19874	O	GLU	D	218	-88.002	-15.715	12.402	1.00	36.03
19875	N	SER	D	219	-89.963	-16.362	11.533	1.00	36.00
19876	CA	SER	D	219	-89.633	-15.898	10.179	1.00	35.98
19877	CB	SER	D	219	-90.638	-16.439	9.163	1.00	36.02
19878	OG	SER	D	219	-91.961	-16.148	9.556	1.00	36.24
19879	C	SER	D	219	-89.514	-14.373	10.000	1.00	36.12
19880	O	SER	D	219	-88.973	-13.910	8.995	1.00	35.86

FIGURE 3 NZ

A	B	C	D	E	F	G	H	I	J
19881	N	LEU	D	220	-90.024	-13.588	10.949	1.00	35.55
19882	CA	LEU	D	220	-89.922	-12.145	10.820	1.00	35.01
19883	CB	LEU	D	220	-90.835	-11.446	11.811	1.00	34.74
19884	CG	LEU	D	220	-91.625	-10.236	11.315	1.00	35.21
19885	CD1	LEU	D	220	-91.666	-9.135	12.401	1.00	29.79
19886	CD2	LEU	D	220	-91.099	-9.711	9.972	1.00	32.56
19887	C	LEU	D	220	-88.483	-11.772	11.113	1.00	35.13
19888	O	LEU	D	220	-88.003	-12.017	12.217	1.00	35.41
19889	N	GLN	D	221	-87.804	-11.173	10.142	1.00	34.37
19890	CA	GLN	D	221	-86.396	-10.850	10.297	1.00	34.60
19891	CB	GLN	D	221	-85.708	-10.670	8.931	1.00	34.28
19892	CG	GLN	D	221	-84.268	-10.179	9.005	1.00	36.05
19893	CD	GLN	D	221	-83.468	-10.432	7.711	1.00	38.63
19894	OE1	GLN	D	221	-82.371	-10.994	7.755	1.00	38.23
19895	NE2	GLN	D	221	-84.017	-10.010	6.569	1.00	38.62
19896	C	GLN	D	221	-86.218	-9.625	11.180	1.00	34.16
19897	O	GLN	D	221	-85.342	-9.575	12.025	1.00	33.56
19898	N	TYR	D	222	-87.061	-8.631	10.983	1.00	34.08
19899	CA	TYR	D	222	-86.981	-7.448	11.808	1.00	33.86
19900	CB	TYR	D	222	-86.860	-6.195	10.945	1.00	33.19
19901	CG	TYR	D	222	-85.502	-6.002	10.315	1.00	32.55
19902	CD1	TYR	D	222	-84.581	-5.148	10.884	1.00	30.98
19903	CE1	TYR	D	222	-83.343	-4.958	10.319	1.00	29.73
19904	CZ	TYR	D	222	-83.007	-5.614	9.168	1.00	30.36
19905	OH	TYR	D	222	-81.754	-5.386	8.628	1.00	27.90
19906	CE2	TYR	D	222	-83.909	-6.472	8.573	1.00	29.02
19907	CD2	TYR	D	222	-85.146	-6.659	9.141	1.00	30.28
19908	C	TYR	D	222	-88.234	-7.358	12.662	1.00	34.09
19909	O	TYR	D	222	-89.335	-7.502	12.160	1.00	34.31
19910	N	PRO	D	223	-88.065	-7.112	13.952	1.00	34.14
19911	CA	PRO	D	223	-89.207	-6.944	14.847	1.00	34.27
19912	CB	PRO	D	223	-88.550	-6.573	16.174	1.00	33.88
19913	CG	PRO	D	223	-87.203	-7.171	16.080	1.00	34.68
19914	CD	PRO	D	223	-86.786	-6.987	14.659	1.00	33.87
19915	C	PRO	D	223	-90.065	-5.797	14.381	1.00	34.22
19916	O	PRO	D	223	-89.557	-4.819	13.859	1.00	34.41
19917	N	LYS	D	224	-91.359	-5.918	14.617	1.00	34.36
19918	CA	LYS	D	224	-92.327	-4.910	14.246	1.00	34.39
19919	CB	LYS	D	224	-93.581	-5.644	13.787	1.00	34.71
19920	CG	LYS	D	224	-94.691	-4.779	13.283	1.00	37.46
19921	CD	LYS	D	224	-95.775	-5.674	12.694	1.00	41.70
19922	CE	LYS	D	224	-96.832	-6.090	13.725	1.00	43.67
19923	NZ	LYS	D	224	-98.161	-5.463	13.412	1.00	44.44
19924	C	LYS	D	224	-92.630	-4.016	15.452	1.00	33.72
19925	O	LYS	D	224	-92.751	-4.491	16.566	1.00	34.71
19926	N	THR	D	225	-92.731	-2.719	15.243	1.00	32.82
19927	CA	THR	D	225	-93.053	-1.816	16.325	1.00	31.33
19928	CB	THR	D	225	-92.217	-0.546	16.220	1.00	31.33
19929	OG1	THR	D	225	-90.834	-0.888	16.378	1.00	28.29
19930	CG2	THR	D	225	-92.513	0.401	17.408	1.00	29.29
19931	C	THR	D	225	-94.539	-1.479	16.295	1.00	31.74

FIGURE 3 OA

A	B	C	D	E	F	G	H	I	J
19932	O	THR	D	225	-95.032	-0.894	15.335	1.00	32.38
19933	N	VAL	D	226	-95.250	-1.885	17.337	1.00	31.14
19934	CA	VAL	D	226	-96.664	-1.612	17.453	1.00	30.16
19935	CB	VAL	D	226	-97.355	-2.626	18.379	1.00	30.16
19936	CG1	VAL	D	226	-98.778	-2.192	18.694	1.00	29.53
19937	CG2	VAL	D	226	-97.313	-4.040	17.779	1.00	28.64
19938	C	VAL	D	226	-96.749	-0.249	18.085	1.00	30.36
19939	O	VAL	D	226	-96.000	0.067	19.033	1.00	30.18
19940	N	ARG	D	227	-97.663	0.558	17.566	1.00	29.90
19941	CA	ARG	D	227	-97.847	1.911	18.031	1.00	29.68
19942	CB	ARG	D	227	-97.330	2.892	16.965	1.00	30.45
19943	CG	ARG	D	227	-95.833	2.741	16.607	1.00	31.29
19944	CD	ARG	D	227	-95.266	3.880	15.753	1.00	33.74
19945	NE	ARG	D	227	-93.794	3.932	15.704	1.00	38.15
19946	CZ	ARG	D	227	-93.013	3.212	14.876	1.00	37.63
19947	NH1	ARG	D	227	-93.548	2.339	14.025	1.00	39.45
19948	NH2	ARG	D	227	-91.696	3.363	14.902	1.00	34.26
19949	C	ARG	D	227	-99.336	2.089	18.265	1.00	29.49
19950	O	ARG	D	227	-100.131	1.899	17.356	1.00	29.57
19951	N	VAL	D	228	-99.740	2.411	19.491	1.00	29.10
19952	CA	VAL	D	228	-101.166	2.580	19.753	1.00	28.12
19953	CB	VAL	D	228	-101.834	1.313	20.377	1.00	28.67
19954	CG1	VAL	D	228	-102.402	1.590	21.760	1.00	29.84
19955	CG2	VAL	D	228	-100.896	0.113	20.397	1.00	27.52
19956	C	VAL	D	228	-101.419	3.833	20.581	1.00	27.61
19957	O	VAL	D	228	-100.664	4.139	21.501	1.00	27.98
19958	N	PRO	D	229	-102.451	4.596	20.223	1.00	26.71
19959	CA	PRO	D	229	-102.738	5.827	20.950	1.00	26.21
19960	CB	PRO	D	229	-103.858	6.482	20.128	1.00	26.21
19961	CG	PRO	D	229	-103.905	5.721	18.827	1.00	26.12
19962	CD	PRO	D	229	-103.407	4.357	19.133	1.00	26.51
19963	C	PRO	D	229	-103.235	5.366	22.297	1.00	25.46
19964	O	PRO	D	229	-104.206	4.619	22.355	1.00	25.44
19965	N	TYR	D	230	-102.563	5.802	23.353	1.00	24.72
19966	CA	TYR	D	230	-102.862	5.379	24.705	1.00	23.40
19967	CB	TYR	D	230	-101.962	4.177	25.017	1.00	23.36
19968	CG	TYR	D	230	-102.160	3.472	26.344	1.00	22.61
19969	CD1	TYR	D	230	-102.622	2.147	26.394	1.00	22.13
19970	CE1	TYR	D	230	-102.777	1.497	27.585	1.00	20.23
19971	CZ	TYR	D	230	-102.459	2.164	28.763	1.00	20.96
19972	OH	TYR	D	230	-102.615	1.556	29.985	1.00	19.64
19973	CE2	TYR	D	230	-101.996	3.468	28.732	1.00	19.94
19974	CD2	TYR	D	230	-101.847	4.104	27.537	1.00	19.59
19975	C	TYR	D	230	-102.548	6.559	25.612	1.00	23.32
19976	O	TYR	D	230	-101.403	7.006	25.713	1.00	23.98
19977	N	PRO	D	231	-103.554	7.097	26.272	1.00	23.36
19978	CA	PRO	D	231	-103.316	8.211	27.185	1.00	23.64
19979	CB	PRO	D	231	-104.667	8.905	27.264	1.00	22.98
19980	CG	PRO	D	231	-105.628	8.016	26.512	1.00	24.01
19981	CD	PRO	D	231	-104.969	6.708	26.228	1.00	23.69
19982	C	PRO	D	231	-102.936	7.662	28.562	1.00	24.12

FIGURE 3 OB

A	B	C	D	E	F	G	H	I	J
19983	O	PRO	D	231	-103.731	6.996	29.240	1.00	24.04
19984	N	LYS	D	232	-101.693	7.905	28.944	1.00	24.54
19985	CA	LYS	D	232	-101.222	7.566	30.262	1.00	24.86
19986	CB	LYS	D	232	-99.696	7.447	30.252	1.00	24.86
19987	CG	LYS	D	232	-99.215	6.189	29.506	1.00	24.09
19988	CD	LYS	D	232	-97.715	6.177	29.268	1.00	23.88
19989	CE	LYS	D	232	-97.232	4.834	28.657	1.00	23.84
19990	NZ	LYS	D	232	-97.246	3.661	29.615	1.00	22.47
19991	C	LYS	D	232	-101.735	8.666	31.182	1.00	25.31
19992	O	LYS	D	232	-102.104	9.744	30.727	1.00	25.47
19993	N	ALA	D	233	-101.791	8.377	32.470	1.00	26.01
19994	CA	ALA	D	233	-102.283	9.325	33.462	1.00	26.13
19995	CB	ALA	D	233	-101.862	8.877	34.834	1.00	25.92
19996	C	ALA	D	233	-101.795	10.740	33.220	1.00	26.28
19997	O	ALA	D	233	-100.604	10.985	33.215	1.00	25.80
19998	N	GLY	D	234	-102.724	11.667	33.021	1.00	26.56
19999	CA	GLY	D	234	-102.359	13.054	32.846	1.00	27.38
20000	C	GLY	D	234	-102.013	13.518	31.438	1.00	28.02
20001	O	GLY	D	234	-101.698	14.693	31.241	1.00	28.33
20002	N	ALA	D	235	-102.064	12.621	30.465	1.00	28.27
20003	CA	ALA	D	235	-101.693	12.967	29.096	1.00	29.15
20004	CB	ALA	D	235	-101.160	11.740	28.350	1.00	28.71
20005	C	ALA	D	235	-102.931	13.463	28.422	1.00	30.05
20006	O	ALA	D	235	-104.018	13.432	29.016	1.00	30.41
20007	N	VAL	D	236	-102.806	13.893	27.169	1.00	30.38
20008	CA	VAL	D	236	-104.001	14.369	26.517	1.00	30.22
20009	CB	VAL	D	236	-103.722	15.366	25.346	1.00	30.88
20010	CG1	VAL	D	236	-103.802	14.675	24.009	1.00	31.62
20011	CG2	VAL	D	236	-102.401	16.090	25.552	1.00	30.21
20012	C	VAL	D	236	-104.842	13.177	26.125	1.00	30.03
20013	O	VAL	D	236	-104.346	12.157	25.637	1.00	30.27
20014	N	ASN	D	237	-106.134	13.324	26.349	1.00	30.09
20015	CA	ASN	D	237	-107.107	12.274	26.141	1.00	30.11
20016	CB	ASN	D	237	-108.166	12.387	27.241	1.00	29.80
20017	CG	ASN	D	237	-107.940	11.424	28.392	1.00	30.52
20018	OD1	ASN	D	237	-106.952	10.678	28.422	1.00	30.25
20019	ND2	ASN	D	237	-108.872	11.429	29.352	1.00	30.08
20020	C	ASN	D	237	-107.796	12.434	24.797	1.00	30.85
20021	O	ASN	D	237	-107.814	13.515	24.235	1.00	31.48
20022	N	PRO	D	238	-108.363	11.361	24.279	1.00	30.78
20023	CA	PRO	D	238	-109.156	11.441	23.069	1.00	31.29
20024	CB	PRO	D	238	-109.615	9.993	22.877	1.00	31.14
20025	CG	PRO	D	238	-109.534	9.419	24.278	1.00	31.07
20026	CD	PRO	D	238	-108.274	9.985	24.799	1.00	31.04
20027	C	PRO	D	238	-110.369	12.330	23.361	1.00	32.20
20028	O	PRO	D	238	-110.814	12.427	24.522	1.00	32.07
20029	N	THR	D	239	-110.874	13.017	22.344	1.00	32.48
20030	CA	THR	D	239	-112.070	13.809	22.548	1.00	32.85
20031	CB	THR	D	239	-111.966	15.207	21.951	1.00	32.83
20032	OG1	THR	D	239	-111.503	15.123	20.597	1.00	33.97
20033	CG2	THR	D	239	-110.909	16.031	22.676	1.00	31.34

FIGURE 3 OC

A	B	C	D	E	F	G	H	I	J
20034	C	THR	D	239	-113.163	13.024	21.885	1.00	33.35
20035	O	THR	D	239	-112.897	12.187	21.029	1.00	34.01
20036	N	VAL	D	240	-114.395	13.269	22.294	1.00	33.86
20037	CA	VAL	D	240	-115.500	12.513	21.748	1.00	34.02
20038	CB	VAL	D	240	-116.100	11.566	22.826	1.00	33.91
20039	CG1	VAL	D	240	-117.224	10.719	22.255	1.00	32.87
20040	CG2	VAL	D	240	-116.573	12.356	24.030	1.00	32.74
20041	C	VAL	D	240	-116.582	13.443	21.231	1.00	34.58
20042	O	VAL	D	240	-116.815	14.520	21.780	1.00	34.31
20043	N	LYS	D	241	-117.222	13.025	20.154	1.00	35.43
20044	CA	LYS	D	241	-118.380	13.733	19.648	1.00	37.05
20045	CB	LYS	D	241	-118.088	14.372	18.300	1.00	36.97
20046	CG	LYS	D	241	-117.967	15.870	18.361	1.00	38.64
20047	CD	LYS	D	241	-116.536	16.337	18.583	1.00	42.01
20048	CE	LYS	D	241	-116.249	17.594	17.744	1.00	42.56
20049	NZ	LYS	D	241	-116.606	17.384	16.306	1.00	41.46
20050	C	LYS	D	241	-119.506	12.727	19.526	1.00	37.27
20051	O	LYS	D	241	-119.251	11.540	19.347	1.00	37.51
20052	N	PHE	D	242	-120.746	13.194	19.631	1.00	38.06
20053	CA	PHE	D	242	-121.895	12.300	19.539	1.00	38.80
20054	CB	PHE	D	242	-122.654	12.258	20.868	1.00	38.44
20055	CG	PHE	D	242	-123.665	11.153	20.943	1.00	37.10
20056	CD1	PHE	D	242	-123.261	9.842	21.131	1.00	36.86
20057	CE1	PHE	D	242	-124.193	8.804	21.184	1.00	35.84
20058	CZ	PHE	D	242	-125.535	9.087	21.051	1.00	35.22
20059	CE2	PHE	D	242	-125.947	10.399	20.856	1.00	35.00
20060	CD2	PHE	D	242	-125.015	11.418	20.796	1.00	35.38
20061	C	PHE	D	242	-122.837	12.664	18.388	1.00	39.90
20062	O	PHE	D	242	-123.058	13.831	18.097	1.00	40.25
20063	N	PHE	D	243	-123.406	11.660	17.738	1.00	41.32
20064	CA	PHE	D	243	-124.248	11.917	16.582	1.00	43.02
20065	CB	PHE	D	243	-123.416	11.794	15.279	1.00	43.24
20066	CG	PHE	D	243	-122.235	12.736	15.200	1.00	44.45
20067	CD1	PHE	D	243	-120.989	12.360	15.705	1.00	45.86
20068	CE1	PHE	D	243	-119.893	13.226	15.635	1.00	45.64
20069	CZ	PHE	D	243	-120.037	14.474	15.050	1.00	46.41
20070	CE2	PHE	D	243	-121.281	14.857	14.541	1.00	44.75
20071	CD2	PHE	D	243	-122.364	13.985	14.616	1.00	43.97
20072	C	PHE	D	243	-125.411	10.938	16.490	1.00	43.55
20073	O	PHE	D	243	-125.351	9.839	17.032	1.00	43.91
20074	N	VAL	D	244	-126.477	11.341	15.810	1.00	44.19
20075	CA	VAL	D	244	-127.517	10.374	15.447	1.00	44.95
20076	CB	VAL	D	244	-128.725	10.343	16.413	1.00	44.90
20077	CG1	VAL	D	244	-128.985	11.706	17.015	1.00	45.24
20078	CG2	VAL	D	244	-129.953	9.803	15.706	1.00	44.23
20079	C	VAL	D	244	-127.951	10.583	13.995	1.00	45.46
20080	O	VAL	D	244	-128.018	11.711	13.503	1.00	45.39
20081	N	VAL	D	245	-128.199	9.490	13.294	1.00	46.23
20082	CA	VAL	D	245	-128.586	9.601	11.906	1.00	47.38
20083	CB	VAL	D	245	-127.457	9.099	10.966	1.00	47.64
20084	CG1	VAL	D	245	-127.261	7.594	11.094	1.00	47.24

FIGURE 3 OD

A	B	C	D	E	F	G	H	I	J
20085	CG2	VAL	D	245	-127.733	9.503	9.517	1.00	47.82
20086	C	VAL	D	245	-129.876	8.834	11.671	1.00	48.10
20087	O	VAL	D	245	-130.081	7.766	12.252	1.00	47.57
20088	N	ASN	D	246	-130.760	9.401	10.849	1.00	49.41
20089	CA	ASN	D	246	-131.999	8.712	10.484	1.00	50.73
20090	CB	ASN	D	246	-133.079	9.699	10.034	1.00	50.45
20091	CG	ASN	D	246	-134.456	9.055	9.936	1.00	50.52
20092	OD1	ASN	D	246	-134.581	7.842	9.740	1.00	50.04
20093	ND2	ASN	D	246	-135.498	9.867	10.084	1.00	50.52
20094	C	ASN	D	246	-131.702	7.738	9.368	1.00	51.63
20095	O	ASN	D	246	-131.362	8.147	8.259	1.00	52.34
20096	N	THR	D	247	-131.831	6.450	9.649	1.00	52.85
20097	CA	THR	D	247	-131.547	5.447	8.639	1.00	54.16
20098	CB	THR	D	247	-131.096	4.137	9.282	1.00	54.08
20099	OG1	THR	D	247	-132.190	3.562	10.006	1.00	53.60
20100	CG2	THR	D	247	-130.025	4.401	10.339	1.00	54.01
20101	C	THR	D	247	-132.746	5.168	7.751	1.00	55.42
20102	O	THR	D	247	-132.698	4.272	6.901	1.00	55.55
20103	N	ASP	D	248	-133.831	5.903	7.956	1.00	56.81
20104	CA	ASP	D	248	-135.011	5.697	7.126	1.00	58.51
20105	CB	ASP	D	248	-136.302	5.904	7.923	1.00	58.44
20106	CG	ASP	D	248	-136.734	4.656	8.675	1.00	59.37
20107	OD1	ASP	D	248	-136.255	3.544	8.332	1.00	58.59
20108	OD2	ASP	D	248	-137.555	4.699	9.625	1.00	60.59
20109	C	ASP	D	248	-134.962	6.649	5.944	1.00	59.26
20110	O	ASP	D	248	-135.639	6.444	4.941	1.00	59.45
20111	N	SER	D	249	-134.135	7.682	6.062	1.00	60.19
20112	CA	SER	D	249	-134.041	8.689	5.017	1.00	60.95
20113	CB	SER	D	249	-134.411	10.050	5.586	1.00	60.84
20114	OG	SER	D	249	-133.802	10.221	6.844	1.00	61.32
20115	C	SER	D	249	-132.661	8.750	4.371	1.00	61.45
20116	O	SER	D	249	-132.178	9.829	4.013	1.00	61.57
20117	N	LEU	D	250	-132.020	7.597	4.233	1.00	61.85
20118	CA	LEU	D	250	-130.735	7.550	3.555	1.00	62.45
20119	CB	LEU	D	250	-129.936	6.313	3.962	1.00	62.30
20120	CG	LEU	D	250	-129.092	6.365	5.241	1.00	61.93
20121	CD1	LEU	D	250	-129.486	5.252	6.201	1.00	60.56
20122	CD2	LEU	D	250	-129.126	7.752	5.897	1.00	60.62
20123	C	LEU	D	250	-130.960	7.534	2.047	1.00	62.96
20124	O	LEU	D	250	-131.732	6.717	1.537	1.00	62.64
20125	N	SER	D	251	-130.281	8.429	1.338	1.00	63.68
20126	CA	SER	D	251	-130.415	8.513	-0.110	1.00	64.43
20127	CB	SER	D	251	-130.642	9.960	-0.538	1.00	64.42
20128	OG	SER	D	251	-131.250	10.721	0.496	1.00	65.65
20129	C	SER	D	251	-129.157	7.995	-0.783	1.00	64.62
20130	O	SER	D	251	-128.049	8.255	-0.318	1.00	64.77
20131	N	SER	D	252	-129.330	7.281	-1.890	1.00	65.08
20132	CA	SER	D	252	-128.195	6.760	-2.641	1.00	65.27
20133	CB	SER	D	252	-128.664	5.782	-3.724	1.00	65.35
20134	OG	SER	D	252	-129.605	4.846	-3.222	1.00	65.60
20135	C	SER	D	252	-127.450	7.921	-3.288	1.00	65.29

FIGURE 3 OE

A	B	C	D	E	F	G	H	I	J
20136	O	SER	D	252	-126.265	7.814	-3.610	1.00	65.25
20137	N	VAL	D	253	-128.148	9.041	-3.452	1.00	65.23
20138	CA	VAL	D	253	-127.591	10.195	-4.152	1.00	65.31
20139	CB	VAL	D	253	-128.521	10.634	-5.295	1.00	65.51
20140	CG1	VAL	D	253	-129.757	11.329	-4.738	1.00	65.51
20141	CG2	VAL	D	253	-128.913	9.432	-6.154	1.00	65.72
20142	C	VAL	D	253	-127.292	11.409	-3.276	1.00	65.14
20143	O	VAL	D	253	-127.042	12.502	-3.781	1.00	65.12
20144	N	THR	D	254	-127.329	11.240	-1.963	1.00	64.89
20145	CA	THR	D	254	-126.983	12.357	-1.088	1.00	64.61
20146	CB	THR	D	254	-128.189	13.277	-0.840	1.00	64.72
20147	OG1	THR	D	254	-128.277	13.575	0.559	1.00	65.14
20148	CG2	THR	D	254	-129.486	12.547	-1.126	1.00	65.20
20149	C	THR	D	254	-126.346	11.912	0.224	1.00	64.05
20150	O	THR	D	254	-126.770	10.929	0.830	1.00	64.17
20151	N	ASN	D	255	-125.316	12.639	0.647	1.00	63.32
20152	CA	ASN	D	255	-124.585	12.276	1.853	1.00	62.59
20153	CB	ASN	D	255	-123.325	13.137	2.017	1.00	62.76
20154	CG	ASN	D	255	-122.100	12.516	1.358	1.00	63.08
20155	OD1	ASN	D	255	-122.011	11.298	1.225	1.00	62.12
20156	ND2	ASN	D	255	-121.146	13.356	0.951	1.00	66.29
20157	C	ASN	D	255	-125.433	12.296	3.122	1.00	61.81
20158	O	ASN	D	255	-126.110	13.280	3.427	1.00	61.42
20159	N	ALA	D	256	-125.388	11.178	3.841	1.00	60.91
20160	CA	ALA	D	256	-126.077	11.021	5.110	1.00	59.91
20161	CB	ALA	D	256	-125.513	9.831	5.849	1.00	59.96
20162	C	ALA	D	256	-125.938	12.274	5.962	1.00	59.39
20163	O	ALA	D	256	-124.894	12.933	5.974	1.00	59.13
20164	N	THR	D	257	-126.997	12.615	6.675	1.00	58.66
20165	CA	THR	D	257	-126.920	13.772	7.547	1.00	58.14
20166	CB	THR	D	257	-128.047	14.774	7.223	1.00	58.28
20167	OG1	THR	D	257	-128.258	15.656	8.336	1.00	58.82
20168	CG2	THR	D	257	-129.378	14.045	7.060	1.00	58.70
20169	C	THR	D	257	-126.930	13.318	9.008	1.00	57.32
20170	O	THR	D	257	-127.872	12.682	9.472	1.00	57.48
20171	N	SER	D	258	-125.848	13.610	9.715	1.00	56.10
20172	CA	SER	D	258	-125.742	13.228	11.110	1.00	54.93
20173	CB	SER	D	258	-124.360	12.647	11.411	1.00	54.90
20174	OG	SER	D	258	-124.260	11.321	10.925	1.00	54.88
20175	C	SER	D	258	-126.005	14.443	11.971	1.00	54.33
20176	O	SER	D	258	-125.424	15.506	11.763	1.00	54.02
20177	N	ILE	D	259	-126.907	14.293	12.929	1.00	53.54
20178	CA	ILE	D	259	-127.223	15.392	13.815	1.00	53.01
20179	CB	ILE	D	259	-128.711	15.356	14.211	1.00	53.02
20180	CG1	ILE	D	259	-129.598	15.420	12.966	1.00	53.18
20181	CD1	ILE	D	259	-129.184	16.476	11.957	1.00	52.80
20182	CG2	ILE	D	259	-129.040	16.487	15.170	1.00	52.69
20183	C	ILE	D	259	-126.336	15.247	15.037	1.00	52.78
20184	O	ILE	D	259	-126.327	14.200	15.685	1.00	52.90
20185	N	GLN	D	260	-125.577	16.289	15.343	1.00	52.39
20186	CA	GLN	D	260	-124.690	16.233	16.488	1.00	52.17



FIGURE 3 OF

A	B	C	D	E	F	G	H	I	J
20187	CB	GLN	D	260	-123.464	17.128	16.296	1.00	52.18
20188	CG	GLN	D	260	-122.292	16.735	17.200	1.00	52.37
20189	CD	GLN	D	260	-121.170	17.750	17.197	1.00	53.04
20190	OE1	GLN	D	260	-121.019	18.519	16.245	1.00	52.54
20191	NE2	GLN	D	260	-120.378	17.761	18.267	1.00	52.48
20192	C	GLN	D	260	-125.408	16.611	17.771	1.00	51.82
20193	O	GLN	D	260	-126.126	17.616	17.832	1.00	51.67
20194	N	ILE	D	261	-125.227	15.793	18.800	1.00	51.04
20195	CA	ILE	D	261	-125.777	16.138	20.088	1.00	50.27
20196	CB	ILE	D	261	-126.433	14.940	20.751	1.00	49.94
20197	CG1	ILE	D	261	-127.515	14.372	19.846	1.00	49.61
20198	CD1	ILE	D	261	-128.618	13.668	20.593	1.00	46.90
20199	CG2	ILE	D	261	-127.076	15.354	22.049	1.00	50.39
20200	C	ILE	D	261	-124.620	16.668	20.905	1.00	50.03
20201	O	ILE	D	261	-123.684	15.946	21.222	1.00	50.14
20202	N	THR	D	262	-124.659	17.949	21.221	1.00	49.68
20203	CA	THR	D	262	-123.566	18.522	21.974	1.00	49.18
20204	CB	THR	D	262	-123.579	20.049	21.885	1.00	49.33
20205	OG1	THR	D	262	-122.251	20.542	22.099	1.00	49.03
20206	CG2	THR	D	262	-124.385	20.653	23.044	1.00	49.98
20207	C	THR	D	262	-123.640	18.063	23.422	1.00	48.87
20208	O	THR	D	262	-124.658	17.528	23.868	1.00	48.87
20209	N	ALA	D	263	-122.553	18.281	24.146	1.00	47.91
20210	CA	ALA	D	263	-122.459	17.867	25.527	1.00	47.07
20211	CB	ALA	D	263	-121.045	17.352	25.827	1.00	46.67
20212	C	ALA	D	263	-122.806	19.023	26.445	1.00	46.38
20213	O	ALA	D	263	-122.577	20.183	26.116	1.00	46.72
20214	N	PRO	D	264	-123.352	18.693	27.603	1.00	45.49
20215	CA	PRO	D	264	-123.705	19.687	28.608	1.00	44.96
20216	CB	PRO	D	264	-123.808	18.854	29.887	1.00	44.78
20217	CG	PRO	D	264	-124.261	17.544	29.424	1.00	45.48
20218	CD	PRO	D	264	-123.676	17.327	28.038	1.00	45.73
20219	C	PRO	D	264	-122.591	20.706	28.767	1.00	44.18
20220	O	PRO	D	264	-121.407	20.364	28.782	1.00	43.79
20221	N	ALA	D	265	-122.988	21.960	28.890	1.00	43.13
20222	CA	ALA	D	265	-122.042	23.037	29.069	1.00	42.51
20223	CB	ALA	D	265	-122.793	24.338	29.347	1.00	42.62
20224	C	ALA	D	265	-121.076	22.739	30.209	1.00	41.58
20225	O	ALA	D	265	-119.896	23.040	30.107	1.00	41.21
20226	N	SER	D	266	-121.591	22.155	31.291	1.00	40.80
20227	CA	SER	D	266	-120.781	21.887	32.486	1.00	40.09
20228	CB	SER	D	266	-121.655	21.455	33.672	1.00	39.70
20229	OG	SER	D	266	-122.396	20.300	33.344	1.00	39.99
20230	C	SER	D	266	-119.694	20.850	32.207	1.00	39.33
20231	O	SER	D	266	-118.737	20.732	32.965	1.00	38.97
20232	N	MET	D	267	-119.861	20.124	31.106	1.00	38.50
20233	CA	MET	D	267	-118.891	19.159	30.633	1.00	38.27
20234	CB	MET	D	267	-119.604	18.030	29.889	1.00	37.83
20235	CG	MET	D	267	-120.343	17.102	30.817	1.00	37.74
20236	SD	MET	D	267	-119.194	16.089	31.788	1.00	39.60
20237	CE	MET	D	267	-120.079	15.964	33.348	1.00	38.25

FIGURE 3 OG

A	B	C	D	E	F	G	H	I	J
20238	C	MET	D	267	-117.883	19.811	29.700	1.00	38.44
20239	O	MET	D	267	-116.689	19.525	29.750	1.00	38.63
20240	N	LEU	D	268	-118.368	20.700	28.846	1.00	38.48
20241	CA	LEU	D	268	-117.510	21.337	27.864	1.00	38.50
20242	CB	LEU	D	268	-118.349	22.071	26.820	1.00	38.67
20243	CG	LEU	D	268	-119.297	21.189	26.016	1.00	38.57
20244	CD1	LEU	D	268	-120.371	22.037	25.344	1.00	38.62
20245	CD2	LEU	D	268	-118.534	20.314	24.997	1.00	37.83
20246	C	LEU	D	268	-116.518	22.290	28.483	1.00	38.46
20247	O	LEU	D	268	-115.599	22.734	27.817	1.00	38.96
20248	N	ILE	D	269	-116.700	22.623	29.751	1.00	38.42
20249	CA	ILE	D	269	-115.759	23.521	30.405	1.00	38.59
20250	CB	ILE	D	269	-116.273	23.896	31.798	1.00	38.86
20251	CG1	ILE	D	269	-115.503	25.095	32.348	1.00	40.56
20252	CD1	ILE	D	269	-116.039	26.428	31.878	1.00	43.56
20253	CG2	ILE	D	269	-116.139	22.719	32.745	1.00	40.22
20254	C	ILE	D	269	-114.348	22.906	30.502	1.00	37.84
20255	O	ILE	D	269	-113.385	23.609	30.794	1.00	38.38
20256	N	GLY	D	270	-114.225	21.603	30.249	1.00	36.77
20257	CA	GLY	D	270	-112.932	20.932	30.309	1.00	35.46
20258	C	GLY	D	270	-112.956	19.568	29.643	1.00	34.32
20259	O	GLY	D	270	-113.880	19.259	28.891	1.00	34.07
20260	N	ASP	D	271	-111.944	18.747	29.903	1.00	33.67
20261	CA	ASP	D	271	-111.924	17.389	29.350	1.00	33.32
20262	CB	ASP	D	271	-110.607	16.681	29.681	1.00	33.79
20263	CG	ASP	D	271	-109.419	17.359	29.086	1.00	35.02
20264	OD1	ASP	D	271	-108.276	16.885	29.328	1.00	35.95
20265	OD2	ASP	D	271	-109.533	18.378	28.366	1.00	37.23
20266	C	ASP	D	271	-113.050	16.582	29.971	1.00	32.51
20267	O	ASP	D	271	-113.351	16.734	31.161	1.00	32.49
20268	N	HIS	D	272	-113.637	15.687	29.197	1.00	31.91
20269	CA	HIS	D	272	-114.741	14.884	29.697	1.00	32.19
20270	CB	HIS	D	272	-116.041	15.678	29.568	1.00	32.11
20271	CG	HIS	D	272	-116.228	16.270	28.208	1.00	32.35
20272	ND1	HIS	D	272	-115.644	17.463	27.835	1.00	32.50
20273	CE1	HIS	D	272	-115.948	17.718	26.573	1.00	34.67
20274	NE2	HIS	D	272	-116.697	16.730	26.113	1.00	33.22
20275	CD2	HIS	D	272	-116.877	15.804	27.115	1.00	31.47
20276	C	HIS	D	272	-114.846	13.621	28.862	1.00	32.29
20277	O	HIS	D	272	-114.106	13.449	27.903	1.00	32.69
20278	N	TYR	D	273	-115.778	12.750	29.218	1.00	32.52
20279	CA	TYR	D	273	-115.986	11.522	28.475	1.00	33.29
20280	CB	TYR	D	273	-115.498	10.302	29.281	1.00	33.12
20281	CG	TYR	D	273	-114.110	10.379	29.864	1.00	31.73
20282	CD1	TYR	D	273	-112.994	10.182	29.067	1.00	30.36
20283	CE1	TYR	D	273	-111.727	10.238	29.590	1.00	31.17
20284	CZ	TYR	D	273	-111.546	10.479	30.938	1.00	29.98
20285	OH	TYR	D	273	-110.276	10.517	31.445	1.00	28.23
20286	CE2	TYR	D	273	-112.637	10.675	31.767	1.00	30.64
20287	CD2	TYR	D	273	-113.916	10.613	31.225	1.00	31.15
20288	C	TYR	D	273	-117.464	11.296	28.248	1.00	34.20

FIGURE 3 OH

A	B	C	D	E	F	G	H	I	J
20289	O	TYR	D	273	-118.312	11.815	28.980	1.00	34.77
20290	N	LEU	D	274	-117.778	10.491	27.247	1.00	34.83
20291	CA	LEU	D	274	-119.139	10.032	27.073	1.00	34.79
20292	CB	LEU	D	274	-119.461	9.828	25.592	1.00	34.45
20293	CG	LEU	D	274	-120.756	9.043	25.315	1.00	35.09
20294	CD1	LEU	D	274	-122.002	9.840	25.764	1.00	34.24
20295	CD2	LEU	D	274	-120.873	8.607	23.841	1.00	34.39
20296	C	LEU	D	274	-119.106	8.702	27.808	1.00	35.39
20297	O	LEU	D	274	-118.335	7.821	27.449	1.00	35.10
20298	N	CYS	D	275	-119.908	8.548	28.854	1.00	36.04
20299	CA	CYS	D	275	-119.845	7.315	29.628	1.00	36.43
20300	CB	CYS	D	275	-119.626	7.592	31.117	1.00	36.48
20301	SG	CYS	D	275	-120.887	8.631	31.904	1.00	38.06
20302	C	CYS	D	275	-121.021	6.383	29.437	1.00	36.83
20303	O	CYS	D	275	-120.890	5.191	29.672	1.00	37.45
20304	N	ASP	D	276	-122.170	6.895	29.018	1.00	37.00
20305	CA	ASP	D	276	-123.293	5.994	28.803	1.00	37.55
20306	CB	ASP	D	276	-124.038	5.739	30.109	1.00	37.78
20307	CG	ASP	D	276	-125.085	4.659	29.975	1.00	39.17
20308	OD1	ASP	D	276	-124.723	3.465	30.035	1.00	41.65
20309	OD2	ASP	D	276	-126.302	4.898	29.807	1.00	42.31
20310	C	ASP	D	276	-124.294	6.456	27.750	1.00	37.47
20311	O	ASP	D	276	-124.621	7.635	27.660	1.00	37.06
20312	N	VAL	D	277	-124.773	5.503	26.962	1.00	37.44
20313	CA	VAL	D	277	-125.808	5.772	25.992	1.00	37.51
20314	CB	VAL	D	277	-125.306	5.705	24.530	1.00	37.76
20315	CG1	VAL	D	277	-126.319	6.388	23.616	1.00	37.24
20316	CG2	VAL	D	277	-123.955	6.356	24.373	1.00	37.23
20317	C	VAL	D	277	-126.907	4.728	26.161	1.00	37.85
20318	O	VAL	D	277	-126.650	3.525	26.096	1.00	37.12
20319	N	THR	D	278	-128.127	5.206	26.395	1.00	38.53
20320	CA	THR	D	278	-129.295	4.344	26.496	1.00	39.41
20321	CB	THR	D	278	-129.676	4.161	27.975	1.00	39.65
20322	CG1	THR	D	278	-128.606	3.517	28.693	1.00	41.23
20323	CG2	THR	D	278	-130.834	3.197	28.100	1.00	38.74
20324	C	THR	D	278	-130.491	4.969	25.761	1.00	40.15
20325	O	THR	D	278	-130.845	6.122	26.017	1.00	40.47
20326	N	TRP	D	279	-131.111	4.232	24.846	1.00	40.72
20327	CA	TRP	D	279	-132.348	4.720	24.239	1.00	41.37
20328	CB	TRP	D	279	-132.661	3.973	22.946	1.00	41.57
20329	CG	TRP	D	279	-131.807	4.394	21.810	1.00	42.65
20330	CD1	TRP	D	279	-130.682	3.765	21.342	1.00	42.53
20331	NE1	TRP	D	279	-130.158	4.465	20.282	1.00	43.68
20332	CE2	TRP	D	279	-130.945	5.564	20.041	1.00	44.02
20333	CD2	TRP	D	279	-131.993	5.547	20.987	1.00	43.93
20334	CE3	TRP	D	279	-132.942	6.572	20.950	1.00	45.59
20335	CZ3	TRP	D	279	-132.820	7.564	19.984	1.00	47.26
20336	CH2	TRP	D	279	-131.767	7.550	19.059	1.00	46.13
20337	CZ2	TRP	D	279	-130.827	6.555	19.070	1.00	44.83
20338	C	TRP	D	279	-133.491	4.531	25.235	1.00	41.48
20339	O	TRP	D	279	-133.561	3.507	25.908	1.00	41.96

FIGURE 3 OI

A	B	C	D	E	F	G	H	I	J
20340	N	ALA	D	280	-134.372	5.521	25.332	1.00	41.41
20341	CA	ALA	D	280	-135.516	5.479	26.241	1.00	41.43
20342	CB	ALA	D	280	-135.746	6.848	26.825	1.00	41.35
20343	C	ALA	D	280	-136.768	5.024	25.496	1.00	41.92
20344	O	ALA	D	280	-137.494	4.133	25.943	1.00	41.19
20345	N	THR	D	281	-137.005	5.671	24.356	1.00	42.20
20346	CA	THR	D	281	-138.124	5.376	23.486	1.00	42.77
20347	CB	THR	D	281	-139.229	6.414	23.659	1.00	42.73
20348	OG1	THR	D	281	-138.795	7.646	23.064	1.00	42.34
20349	CG2	THR	D	281	-139.449	6.762	25.122	1.00	42.31
20350	C	THR	D	281	-137.617	5.536	22.069	1.00	43.54
20351	O	THR	D	281	-136.468	5.946	21.853	1.00	43.78
20352	N	GLN	D	282	-138.494	5.252	21.106	1.00	43.58
20353	CA	GLN	D	282	-138.169	5.374	19.687	1.00	43.34
20354	CB	GLN	D	282	-139.431	5.195	18.845	1.00	43.27
20355	CG	GLN	D	282	-140.158	3.909	19.121	1.00	43.95
20356	CD	GLN	D	282	-139.309	2.709	18.820	1.00	44.66
20357	OE1	GLN	D	282	-138.206	2.849	18.278	1.00	47.30
20358	NE2	GLN	D	282	-139.802	1.522	19.170	1.00	43.65
20359	C	GLN	D	282	-137.590	6.725	19.355	1.00	42.89
20360	O	GLN	D	282	-136.854	6.873	18.389	1.00	42.72
20361	N	GLU	D	283	-137.924	7.720	20.158	1.00	42.79
20362	CA	GLU	D	283	-137.516	9.074	19.839	1.00	42.95
20363	CB	GLU	D	283	-138.734	9.865	19.349	1.00	43.48
20364	CG	GLU	D	283	-139.167	9.566	17.906	1.00	45.44
20365	CD	GLU	D	283	-140.418	10.348	17.491	1.00	48.85
20366	OE1	GLU	D	283	-141.304	9.755	16.816	1.00	49.34
20367	OE2	GLU	D	283	-140.522	11.551	17.845	1.00	46.90
20368	C	GLU	D	283	-136.835	9.811	20.986	1.00	42.50
20369	O	GLU	D	283	-136.660	11.021	20.926	1.00	42.35
20370	N	ARG	D	284	-136.450	9.086	22.031	1.00	42.30
20371	CA	ARG	D	284	-135.792	9.710	23.173	1.00	41.72
20372	CB	ARG	D	284	-136.735	9.763	24.368	1.00	42.06
20373	CG	ARG	D	284	-136.136	10.438	25.583	1.00	43.16
20374	CD	ARG	D	284	-137.154	10.734	26.671	1.00	45.69
20375	NE	ARG	D	284	-138.146	11.706	26.221	1.00	46.17
20376	CZ	ARG	D	284	-139.431	11.660	26.544	1.00	46.79
20377	NH1	ARG	D	284	-140.261	12.587	26.083	1.00	45.42
20378	NH2	ARG	D	284	-139.886	10.691	27.335	1.00	46.32
20379	C	ARG	D	284	-134.514	8.990	23.568	1.00	40.91
20380	O	ARG	D	284	-134.515	7.788	23.805	1.00	40.62
20381	N	ILE	D	285	-133.421	9.731	23.656	1.00	40.02
20382	CA	ILE	D	285	-132.170	9.109	24.036	1.00	39.17
20383	CB	ILE	D	285	-131.208	9.053	22.818	1.00	39.17
20384	CG1	ILE	D	285	-130.025	8.132	23.089	1.00	39.43
20385	CD1	ILE	D	285	-129.076	8.043	21.909	1.00	39.70
20386	CG2	ILE	D	285	-130.727	10.426	22.424	1.00	39.53
20387	C	ILE	D	285	-131.540	9.805	25.229	1.00	38.69
20388	O	ILE	D	285	-131.601	11.023	25.339	1.00	38.19
20389	N	SER	D	286	-130.971	9.027	26.155	1.00	37.96
20390	CA	SER	D	286	-130.228	9.644	27.246	1.00	37.07

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 OJ**

A	B	C	D	E	F	G	H	I	J
20391	CB	SER	D	286	-130.787	9.287	28.631	1.00	36.91
20392	OG	SER	D	286	-130.305	8.049	29.100	1.00	36.51
20393	C	SER	D	286	-128.742	9.325	27.121	1.00	36.39
20394	O	SER	D	286	-128.344	8.215	26.757	1.00	36.15
20395	N	LEU	D	287	-127.940	10.336	27.404	1.00	35.78
20396	CA	LEU	D	287	-126.498	10.248	27.327	1.00	35.18
20397	CB	LEU	D	287	-125.957	11.283	26.338	1.00	35.62
20398	CG	LEU	D	287	-125.957	11.077	24.822	1.00	35.97
20399	CD1	LEU	D	287	-126.134	12.431	24.182	1.00	36.47
20400	CD2	LEU	D	287	-127.031	10.140	24.357	1.00	36.95
20401	C	LEU	D	287	-125.994	10.652	28.683	1.00	34.51
20402	O	LEU	D	287	-126.520	11.597	29.279	1.00	34.09
20403	N	GLN	D	288	-124.984	9.944	29.177	1.00	33.47
20404	CA	GLN	D	288	-124.341	10.347	30.420	1.00	32.77
20405	CB	GLN	D	288	-124.354	9.230	31.461	1.00	33.02
20406	CG	GLN	D	288	-125.640	9.149	32.265	1.00	33.25
20407	CD	GLN	D	288	-125.781	7.848	33.036	1.00	33.72
20408	OE1	GLN	D	288	-126.381	6.890	32.546	1.00	34.15
20409	NE2	GLN	D	288	-125.253	7.818	34.247	1.00	34.08
20410	C	GLN	D	288	-122.924	10.786	30.121	1.00	32.53
20411	O	GLN	D	288	-122.161	10.118	29.412	1.00	32.11
20412	N	TRP	D	289	-122.580	11.937	30.656	1.00	32.67
20413	CA	TRP	D	289	-121.262	12.465	30.478	1.00	32.77
20414	CB	TRP	D	289	-121.336	13.869	29.878	1.00	32.94
20415	CG	TRP	D	289	-121.977	13.907	28.527	1.00	33.67
20416	CD1	TRP	D	289	-123.315	13.991	28.255	1.00	34.03
20417	NE1	TRP	D	289	-123.517	14.015	26.897	1.00	35.17
20418	CE2	TRP	D	289	-122.303	13.945	26.265	1.00	35.17
20419	CD2	TRP	D	289	-121.312	13.878	27.264	1.00	34.12
20420	CE3	TRP	D	289	-119.970	13.802	26.870	1.00	35.13
20421	C23	TRP	D	289	-119.670	13.792	25.519	1.00	35.56
20422	CH2	TRP	D	289	-120.683	13.851	24.550	1.00	35.24
20423	C22	TRP	D	289	-122.001	13.920	24.901	1.00	35.14
20424	C	TRP	D	289	-120.600	12.501	31.843	1.00	32.64
20425	O	TRP	D	289	-121.267	12.632	32.862	1.00	32.65
20426	N	LEU	D	290	-119.276	12.433	31.835	1.00	32.23
20427	CA	LEU	D	290	-118.480	12.396	33.035	1.00	31.50
20428	CB	LEU	D	290	-117.977	10.954	33.193	1.00	31.05
20429	CG	LEU	D	290	-117.433	10.401	34.510	1.00	31.54
20430	CD1	LEU	D	290	-116.676	9.076	34.307	1.00	28.56
20431	CD2	LEU	D	290	-116.554	11.423	35.166	1.00	33.60
20432	C	LEU	D	290	-117.293	13.336	32.802	1.00	31.41
20433	O	LEU	D	290	-116.667	13.265	31.745	1.00	30.88
20434	N	ARG	D	291	-116.978	14.203	33.764	1.00	31.88
20435	CA	ARG	D	291	-115.771	15.045	33.667	1.00	32.91
20436	CB	ARG	D	291	-115.707	16.094	34.777	1.00	32.88
20437	CG	ARG	D	291	-116.716	17.216	34.692	1.00	35.43
20438	CD	ARG	D	291	-116.485	18.321	35.708	1.00	37.01
20439	NE	ARG	D	291	-117.415	19.416	35.493	1.00	41.05
20440	CZ	ARG	D	291	-117.945	20.154	36.461	1.00	42.21
20441	NH1	ARG	D	291	-118.791	21.128	36.159	1.00	41.92

FIGURE 3 OK

A	B	C	D	E	F	G	H	I	J
20442	NH2	ARG	D	291	-117.630	19.919	37.725	1.00	42.53
20443	C	ARG	D	291	-114.535	14.167	33.825	1.00	32.92
20444	O	ARG	D	291	-114.645	13.026	34.262	1.00	33.01
20445	N	ARG	D	292	-113.363	14.723	33.515	1.00	32.96
20446	CA	ARG	D	292	-112.110	13.990	33.596	1.00	32.38
20447	CB	ARG	D	292	-110.986	14.716	32.858	1.00	32.31
20448	CG	ARG	D	292	-109.677	13.916	32.806	1.00	30.46
20449	CD	ARG	D	292	-108.648	14.447	31.837	1.00	28.09
20450	NE	ARG	D	292	-107.460	13.621	31.878	1.00	29.22
20451	CZ	ARG	D	292	-106.444	13.701	31.032	1.00	27.77
20452	NH1	ARG	D	292	-105.420	12.880	31.189	1.00	25.10
20453	NH2	ARG	D	292	-106.445	14.600	30.048	1.00	26.35
20454	C	ARG	D	292	-111.774	13.762	35.063	1.00	32.53
20455	O	ARG	D	292	-111.109	12.787	35.435	1.00	32.20
20456	N	ILE	D	293	-112.217	14.686	35.893	1.00	32.32
20457	CA	ILE	D	293	-112.211	14.435	37.318	1.00	32.41
20458	CB	ILE	D	293	-112.136	15.741	38.079	1.00	32.54
20459	CG1	ILE	D	293	-110.732	16.327	37.879	1.00	32.98
20460	CD1	ILE	D	293	-110.643	17.819	38.099	1.00	36.74
20461	CG2	ILE	D	293	-112.359	15.518	39.559	1.00	32.59
20462	C	ILE	D	293	-113.535	13.701	37.448	1.00	32.41
20463	O	ILE	D	293	-114.598	14.297	37.340	1.00	33.13
20464	N	GLN	D	294	-113.466	12.385	37.591	1.00	32.20
20465	CA	GLN	D	294	-114.659	11.551	37.500	1.00	32.03
20466	CB	GLN	D	294	-114.275	10.138	37.029	1.00	31.78
20467	CG	GLN	D	294	-113.344	10.123	35.810	1.00	29.87
20468	CD	GLN	D	294	-112.862	8.725	35.449	1.00	28.26
20469	OE1	GLN	D	294	-113.610	7.741	35.563	1.00	27.79
20470	NE2	GLN	D	294	-111.624	8.633	35.010	1.00	25.11
20471	C	GLN	D	294	-115.556	11.475	38.744	1.00	32.55
20472	O	GLN	D	294	-116.094	10.409	39.052	1.00	32.15
20473	N	ASN	D	295	-115.727	12.599	39.432	1.00	33.11
20474	CA	ASN	D	295	-116.619	12.665	40.587	1.00	34.47
20475	CB	ASN	D	295	-115.913	13.277	41.791	1.00	34.41
20476	CG	ASN	D	295	-115.469	14.704	41.537	1.00	36.21
20477	OD1	ASN	D	295	-115.681	15.248	40.448	1.00	35.00
20478	NH2	ASN	D	295	-114.846	15.320	42.542	1.00	41.71
20479	C	ASN	D	295	-117.848	13.507	40.267	1.00	34.82
20480	O	ASN	D	295	-118.524	13.998	41.176	1.00	34.45
20481	N	TYR	D	296	-118.137	13.664	38.975	1.00	35.06
20482	CA	TYR	D	296	-119.256	14.488	38.543	1.00	35.12
20483	CB	TYR	D	296	-118.833	15.954	38.571	1.00	35.37
20484	CG	TYR	D	296	-119.946	16.957	38.360	1.00	37.19
20485	CD1	TYR	D	296	-120.609	17.530	39.444	1.00	38.39
20486	CE1	TYR	D	296	-121.626	18.465	39.259	1.00	40.01
20487	CZ	TYR	D	296	-121.976	18.838	37.978	1.00	41.13
20488	OH	TYR	D	296	-122.980	19.757	37.780	1.00	42.62
20489	CE2	TYR	D	296	-121.324	18.285	36.889	1.00	40.09
20490	CD2	TYR	D	296	-120.314	17.356	37.084	1.00	37.55
20491	C	TYR	D	296	-119.709	14.127	37.136	1.00	35.16
20492	O	TYR	D	296	-118.988	14.337	36.162	1.00	34.80

FIGURE 3 OL

A	B	C	D	E	F	G	H	I	J
20493	N	SER	D	297	-120.908	13.582	37.025	1.00	35.38
20494	CA	SER	D	297	-121.451	13.263	35.721	1.00	36.16
20495	CB	SER	D	297	-121.494	11.762	35.502	1.00	35.37
20496	OG	SER	D	297	-122.413	11.168	36.377	1.00	35.55
20497	C	SER	D	297	-122.849	13.858	35.561	1.00	37.14
20498	O	SER	D	297	-123.520	14.191	36.538	1.00	37.05
20499	N	VAL	D	298	-123.275	13.993	34.312	1.00	38.56
20500	CA	VAL	D	298	-124.569	14.571	34.001	1.00	39.87
20501	CB	VAL	D	298	-124.418	15.988	33.414	1.00	39.92
20502	CG1	VAL	D	298	-123.878	16.937	34.446	1.00	39.22
20503	CG2	VAL	D	298	-125.762	16.485	32.869	1.00	40.40
20504	C	VAL	D	298	-125.279	13.735	32.960	1.00	40.81
20505	O	VAL	D	298	-124.680	13.363	31.960	1.00	40.95
20506	N	MET	D	299	-126.545	13.417	33.211	1.00	42.07
20507	CA	MET	D	299	-127.357	12.754	32.209	1.00	43.04
20508	CB	MET	D	299	-128.318	11.730	32.814	1.00	43.12
20509	CG	MET	D	299	-129.343	11.197	31.808	1.00	42.96
20510	SD	MET	D	299	-130.440	9.940	32.496	1.00	44.48
20511	CE	MET	D	299	-130.314	10.360	34.181	1.00	46.63
20512	C	MET	D	299	-128.151	13.805	31.439	1.00	44.09
20513	O	MET	D	299	-128.743	14.720	32.020	1.00	43.89
20514	N	ASP	D	300	-128.134	13.662	30.122	1.00	45.17
20515	CA	ASP	D	300	-128.873	14.510	29.221	1.00	46.32
20516	CB	ASP	D	300	-127.955	15.027	28.120	1.00	46.52
20517	CG	ASP	D	300	-127.772	16.516	28.173	1.00	47.88
20518	OD1	ASP	D	300	-126.715	17.002	27.725	1.00	50.30
20519	OD2	ASP	D	300	-128.635	17.287	28.628	1.00	50.64
20520	C	ASP	D	300	-129.926	13.643	28.589	1.00	47.06
20521	O	ASP	D	300	-129.624	12.575	28.062	1.00	47.36
20522	N	ILE	D	301	-131.170	14.090	28.641	1.00	48.02
20523	CA	ILE	D	301	-132.242	13.358	28.006	1.00	48.60
20524	CB	ILE	D	301	-133.408	13.185	28.991	1.00	48.50
20525	CG1	ILE	D	301	-132.894	12.408	30.212	1.00	48.51
20526	CD1	ILE	D	301	-133.961	11.793	31.083	1.00	48.21
20527	CG2	ILE	D	301	-134.562	12.441	28.345	1.00	48.06
20528	C	ILE	D	301	-132.583	14.133	26.738	1.00	49.46
20529	O	ILE	D	301	-132.856	15.328	26.786	1.00	49.71
20530	N	CYS	D	302	-132.521	13.457	25.600	1.00	50.41
20531	CA	CYS	D	302	-132.647	14.130	24.315	1.00	51.74
20532	CB	CYS	D	302	-131.331	14.004	23.536	1.00	51.94
20533	SG	CYS	D	302	-129.912	14.700	24.420	1.00	53.42
20534	C	CYS	D	302	-133.813	13.662	23.463	1.00	52.24
20535	O	CYS	D	302	-133.946	12.472	23.163	1.00	52.21
20536	N	ASP	D	303	-134.642	14.619	23.061	1.00	53.09
20537	CA	ASP	D	303	-135.832	14.334	22.271	1.00	54.23
20538	CB	ASP	D	303	-137.057	15.022	22.887	1.00	54.39
20539	CG	ASP	D	303	-137.524	14.344	24.169	1.00	54.66
20540	OD1	ASP	D	303	-136.697	14.174	25.088	1.00	55.54
20541	OD2	ASP	D	303	-138.692	13.945	24.347	1.00	54.11
20542	C	ASP	D	303	-135.692	14.734	20.807	1.00	54.70
20543	O	ASP	D	303	-135.141	15.778	20.474	1.00	54.30

FIGURE 3 OM

A	B	C	D	E	F	G	H	I	J
20544	N	TYR	D	304	-136.200	13.888	19.930	1.00	56.01
20545	CA	TYR	D	304	-136.153	14.183	18.515	1.00	57.68
20546	CB	TYR	D	304	-136.262	12.906	17.695	1.00	57.57
20547	CG	TYR	D	304	-136.301	13.173	16.209	1.00	58.83
20548	CD1	TYR	D	304	-135.197	13.707	15.553	1.00	59.38
20549	CE1	TYR	D	304	-135.228	13.966	14.196	1.00	59.37
20550	CZ	TYR	D	304	-136.370	13.693	13.475	1.00	59.89
20551	OH	TYR	D	304	-136.397	13.941	12.118	1.00	59.96
20552	CE2	TYR	D	304	-137.480	13.162	14.102	1.00	59.92
20553	CD2	TYR	D	304	-137.445	12.913	15.462	1.00	59.06
20554	C	TYR	D	304	-137.267	15.143	18.109	1.00	58.63
20555	O	TYR	D	304	-138.422	14.745	18.012	1.00	58.68
20556	N	ASP	D	305	-136.922	16.407	17.887	1.00	59.92
20557	CA	ASP	D	305	-137.902	17.361	17.395	1.00	61.44
20558	CB	ASP	D	305	-137.400	18.795	17.523	1.00	61.67
20559	CG	ASP	D	305	-138.430	19.803	17.065	1.00	62.80
20560	OD1	ASP	D	305	-138.633	20.826	17.764	1.00	62.88
20561	OD2	ASP	D	305	-139.087	19.637	16.012	1.00	63.63
20562	C	ASP	D	305	-138.175	16.999	15.938	1.00	61.97
20563	O	ASP	D	305	-137.269	16.973	15.113	1.00	61.92
20564	N	GLU	D	306	-139.429	16.708	15.627	1.00	63.01
20565	CA	GLU	D	306	-139.767	16.182	14.310	1.00	63.99
20566	CB	GLU	D	306	-141.091	15.429	14.356	1.00	64.23
20567	CG	GLU	D	306	-141.119	14.228	13.434	1.00	66.05
20568	CD	GLU	D	306	-142.517	13.673	13.237	1.00	68.18
20569	OE1	GLU	D	306	-143.390	13.927	14.101	1.00	68.46
20570	OE2	GLU	D	306	-142.739	12.980	12.216	1.00	68.71
20571	C	GLU	D	306	-139.802	17.239	13.222	1.00	64.19
20572	O	GLU	D	306	-139.649	16.924	12.045	1.00	64.14
20573	N	SER	D	307	-140.012	18.487	13.621	1.00	64.69
20574	CA	SER	D	307	-140.004	19.595	12.680	1.00	65.06
20575	CB	SER	D	307	-140.691	20.821	13.282	1.00	65.19
20576	OG	SER	D	307	-141.988	20.490	13.763	1.00	65.21
20577	C	SER	D	307	-138.549	19.896	12.355	1.00	65.21
20578	O	SER	D	307	-138.081	19.586	11.258	1.00	65.60
20579	N	SER	D	308	-137.835	20.461	13.332	1.00	65.02
20580	CA	SER	D	308	-136.411	20.789	13.207	1.00	64.38
20581	CB	SER	D	308	-135.793	21.013	14.589	1.00	64.52
20582	OG	SER	D	308	-135.747	22.393	14.902	1.00	65.23
20583	C	SER	D	308	-135.606	19.724	12.489	1.00	63.76
20584	O	SER	D	308	-134.656	20.036	11.773	1.00	63.76
20585	N	GLY	D	309	-135.979	18.466	12.698	1.00	63.19
20586	CA	GLY	D	309	-135.275	17.345	12.100	1.00	62.51
20587	C	GLY	D	309	-134.091	16.932	12.959	1.00	62.07
20588	O	GLY	D	309	-133.438	15.915	12.696	1.00	62.28
20589	N	ARG	D	310	-133.826	17.718	13.997	1.00	61.04
20590	CA	ARG	D	310	-132.707	17.455	14.883	1.00	60.56
20591	CB	ARG	D	310	-131.809	18.692	14.970	1.00	61.19
20592	CG	ARG	D	310	-132.446	19.896	15.631	1.00	62.68
20593	CD	ARG	D	310	-131.544	21.129	15.652	1.00	65.34
20594	NE	ARG	D	310	-131.768	22.029	14.520	1.00	66.16



FIGURE 3 ON

A	B	C	D	E	F	G	H	I	J
20595	CZ	ARG	D	310	-131.081	21.998	13.380	1.00	67.31
20596	NH1	ARG	D	310	-131.357	22.870	12.413	1.00	66.51
20597	NH2	ARG	D	310	-130.119	21.097	13.201	1.00	67.36
20598	C	ARG	D	310	-133.123	16.973	16.283	1.00	59.42
20599	O	ARG	D	310	-134.267	16.569	16.497	1.00	59.28
20600	N	TRP	D	311	-132.182	17.011	17.227	1.00	58.05
20601	CA	TRP	D	311	-132.417	16.522	18.586	1.00	56.38
20602	CB	TRP	D	311	-131.471	15.371	18.886	1.00	55.45
20603	CG	TRP	D	311	-131.778	14.187	18.077	1.00	51.45
20604	CD1	TRP	D	311	-131.477	13.993	16.772	1.00	48.75
20605	NE1	TRP	D	311	-131.945	12.771	16.353	1.00	48.27
20606	CE2	TRP	D	311	-132.569	12.155	17.404	1.00	47.06
20607	CD2	TRP	D	311	-132.488	13.027	18.505	1.00	47.70
20608	CE3	TRP	D	311	-133.062	12.631	19.711	1.00	44.75
20609	CZ3	TRP	D	311	-133.677	11.410	19.779	1.00	44.35
20610	CH2	TRP	D	311	-133.744	10.567	18.670	1.00	44.07
20611	CZ2	TRP	D	311	-133.197	10.921	17.473	1.00	45.46
20612	C	TRP	D	311	-132.254	17.579	19.658	1.00	56.90
20613	O	TRP	D	311	-131.300	18.362	19.636	1.00	56.98
20614	N	ASN	D	312	-133.177	17.596	20.615	1.00	56.96
20615	CA	ASN	D	312	-133.102	18.574	21.695	1.00	57.11
20616	CB	ASN	D	312	-134.315	19.508	21.671	1.00	57.41
20617	CG	ASN	D	312	-134.052	20.792	20.885	1.00	58.91
20618	OD1	ASN	D	312	-132.897	21.208	20.709	1.00	59.51
20619	ND2	ASN	D	312	-135.128	21.434	20.420	1.00	58.89
20620	C	ASN	D	312	-132.954	17.948	23.070	1.00	56.68
20621	O	ASN	D	312	-133.574	16.930	23.370	1.00	56.68
20622	N	CYS	D	313	-132.133	18.569	23.906	1.00	56.20
20623	CA	CYS	D	313	-131.908	18.078	25.255	1.00	55.75
20624	CB	CYS	D	313	-130.443	17.686	25.445	1.00	55.84
20625	SG	CYS	D	313	-129.763	16.705	24.092	1.00	55.50
20626	C	CYS	D	313	-132.268	19.163	26.246	1.00	55.52
20627	O	CYS	D	313	-131.425	19.987	26.599	1.00	55.53
20628	N	LEU	D	314	-133.519	19.162	26.694	1.00	55.08
20629	CA	LEU	D	314	-133.976	20.158	27.651	1.00	54.79
20630	CB	LEU	D	314	-135.447	19.942	28.018	1.00	55.02
20631	CG	LEU	D	314	-136.506	20.571	27.104	1.00	55.62
20632	CD1	LEU	D	314	-137.176	19.536	26.206	1.00	55.79
20633	CD2	LEU	D	314	-135.908	21.728	26.288	1.00	56.04
20634	C	LEU	D	314	-133.129	20.177	28.915	1.00	54.45
20635	O	LEU	D	314	-132.995	19.167	29.608	1.00	54.22
20636	N	VAL	D	315	-132.569	21.345	29.199	1.00	53.93
20637	CA	VAL	D	315	-131.762	21.569	30.386	1.00	53.93
20638	CB	VAL	D	315	-131.346	23.042	30.470	1.00	53.93
20639	CG1	VAL	D	315	-130.998	23.423	31.888	1.00	54.90
20640	CG2	VAL	D	315	-130.176	23.314	29.524	1.00	54.82
20641	C	VAL	D	315	-132.478	21.187	31.679	1.00	53.48
20642	O	VAL	D	315	-131.846	20.806	32.663	1.00	53.58
20643	N	ALA	D	316	-133.799	21.295	31.672	1.00	53.18
20644	CA	ALA	D	316	-134.602	20.967	32.837	1.00	52.74
20645	CB	ALA	D	316	-135.996	21.530	32.684	1.00	52.92

FIGURE 3 OO

A	B	C	D	E	F	G	H	I	J
20646	C	ALA	D	316	-134.666	19.460	33.030	1.00	52.37
20647	O	ALA	D	316	-135.096	18.972	34.077	1.00	52.77
20648	N	ARG	D	317	-134.247	18.717	32.016	1.00	51.33
20649	CA	ARG	D	317	-134.253	17.274	32.135	1.00	50.77
20650	CB	ARG	D	317	-134.882	16.631	30.901	1.00	51.02
20651	CG	ARG	D	317	-136.108	17.366	30.428	1.00	52.18
20652	CD	ARG	D	317	-137.318	16.497	30.194	1.00	53.70
20653	NE	ARG	D	317	-137.391	15.960	28.842	1.00	54.03
20654	CZ	ARG	D	317	-138.480	16.017	28.084	1.00	54.06
20655	NH1	ARG	D	317	-138.470	15.493	26.864	1.00	53.60
20656	NH2	ARG	D	317	-139.579	16.600	28.547	1.00	52.91
20657	C	ARG	D	317	-132.858	16.717	32.399	1.00	49.84
20658	O	ARG	D	317	-132.619	15.529	32.209	1.00	49.58
20659	N	GLN	D	318	-131.942	17.577	32.836	1.00	48.91
20660	CA	GLN	D	318	-130.589	17.139	33.137	1.00	48.44
20661	CB	GLN	D	318	-129.603	18.306	33.094	1.00	48.44
20662	CG	GLN	D	318	-128.828	18.456	31.790	1.00	48.19
20663	CD	GLN	D	318	-127.857	19.628	31.827	1.00	48.03
20664	OE1	GLN	D	318	-127.772	20.396	30.870	1.00	49.25
20665	NE2	GLN	D	318	-127.131	19.774	32.935	1.00	48.01
20666	C	GLN	D	318	-130.544	16.478	34.512	1.00	48.18
20667	O	GLN	D	318	-131.259	16.883	35.438	1.00	48.50
20668	N	HIS	D	319	-129.713	15.455	34.648	1.00	46.99
20669	CA	HIS	D	319	-129.576	14.803	35.937	1.00	46.42
20670	CB	HIS	D	319	-130.256	13.442	35.930	1.00	46.33
20671	CG	HIS	D	319	-131.735	13.531	35.743	1.00	47.19
20672	ND1	HIS	D	319	-132.617	13.596	36.801	1.00	47.10
20673	CE1	HIS	D	319	-133.850	13.688	36.335	1.00	47.18
20674	NE2	HIS	D	319	-133.799	13.696	35.016	1.00	47.10
20675	CD2	HIS	D	319	-132.487	13.612	34.620	1.00	47.64
20676	C	HIS	D	319	-128.118	14.714	36.332	1.00	45.70
20677	O	HIS	D	319	-127.283	14.184	35.598	1.00	45.25
20678	N	ILE	D	320	-127.831	15.288	37.490	1.00	44.95
20679	CA	ILE	D	320	-126.497	15.329	38.023	1.00	44.45
20680	CB	ILE	D	320	-126.261	16.630	38.766	1.00	44.62
20681	CG1	ILE	D	320	-126.225	17.804	37.796	1.00	44.89
20682	CD1	ILE	D	320	-126.136	19.134	38.510	1.00	47.11
20683	CG2	ILE	D	320	-124.967	16.542	39.555	1.00	43.94
20684	C	ILE	D	320	-126.268	14.192	38.992	1.00	44.24
20685	O	ILE	D	320	-127.088	13.934	39.878	1.00	43.73
20686	N	GLU	D	321	-125.144	13.516	38.801	1.00	43.70
20687	CA	GLU	D	321	-124.720	12.461	39.697	1.00	43.55
20688	CB	GLU	D	321	-124.890	11.095	39.051	1.00	43.54
20689	CG	GLU	D	321	-124.672	9.948	40.019	1.00	44.31
20690	CD	GLU	D	321	-124.872	8.607	39.356	1.00	44.06
20691	OE1	GLU	D	321	-125.701	8.539	38.425	1.00	44.82
20692	OE2	GLU	D	321	-124.198	7.632	39.756	1.00	43.52
20693	C	GLU	D	321	-123.259	12.749	40.018	1.00	43.27
20694	O	GLU	D	321	-122.401	12.727	39.141	1.00	43.00
20695	N	MET	D	322	-123.013	13.091	41.274	1.00	42.93
20696	CA	MET	D	322	-121.685	13.406	41.758	1.00	42.92

FIGURE 3 OP

A	B	C	D	E	F	G	H	I	J
20697	CB	MET	D	322	-121.601	14.891	42.095	1.00	43.71
20698	CG	MET	D	322	-122.219	15.230	43.448	1.00	46.97
20699	SD	MET	D	322	-122.326	17.005	43.743	1.00	55.22
20700	CE	MET	D	322	-123.151	17.545	42.282	1.00	52.68
20701	C	MET	D	322	-121.385	12.600	43.019	1.00	41.70
20702	O	MET	D	322	-122.237	11.876	43.538	1.00	41.07
20703	N	SER	D	323	-120.154	12.722	43.486	1.00	40.83
20704	CA	SER	D	323	-119.723	12.116	44.737	1.00	40.38
20705	CB	SER	D	323	-119.042	10.760	44.517	1.00	40.42
20706	OG	SER	D	323	-118.401	10.332	45.706	1.00	41.01
20707	C	SER	D	323	-118.757	13.073	45.407	1.00	39.86
20708	O	SER	D	323	-117.988	13.763	44.747	1.00	39.03
20709	N	THR	D	324	-118.806	13.115	46.728	1.00	39.80
20710	CA	THR	D	324	-117.933	13.991	47.480	1.00	39.64
20711	CB	THR	D	324	-118.738	14.687	48.567	1.00	40.55
20712	OG1	THR	D	324	-119.514	13.702	49.269	1.00	41.35
20713	CG2	THR	D	324	-119.809	15.607	47.921	1.00	41.21
20714	C	THR	D	324	-116.840	13.185	48.123	1.00	38.69
20715	O	THR	D	324	-115.885	13.748	48.634	1.00	39.17
20716	N	THR	D	325	-116.988	11.865	48.113	1.00	37.53
20717	CA	THR	D	325	-115.999	10.993	48.729	1.00	36.20
20718	CB	THR	D	325	-116.679	9.974	49.665	1.00	36.26
20719	OG1	THR	D	325	-117.738	9.296	48.968	1.00	34.46
20720	CG2	THR	D	325	-117.390	10.688	50.802	1.00	36.13
20721	C	THR	D	325	-115.165	10.236	47.708	1.00	35.74
20722	O	THR	D	325	-114.194	9.591	48.069	1.00	35.67
20723	N	GLY	D	326	-115.542	10.292	46.436	1.00	34.80
20724	CA	GLY	D	326	-114.782	9.552	45.447	1.00	34.05
20725	C	GLY	D	326	-115.213	9.764	44.014	1.00	33.13
20726	O	GLY	D	326	-115.473	10.883	43.595	1.00	33.76
20727	N	TRP	D	327	-115.278	8.686	43.253	1.00	32.05
20728	CA	TRP	D	327	-115.703	8.779	41.856	1.00	31.00
20729	CB	TRP	D	327	-114.857	7.848	40.999	1.00	30.19
20730	CG	TRP	D	327	-114.915	6.432	41.450	1.00	28.25
20731	CD1	TRP	D	327	-115.692	5.446	40.930	1.00	26.84
20732	NE1	TRP	D	327	-115.468	4.266	41.598	1.00	27.93
20733	CE2	TRP	D	327	-114.541	4.480	42.585	1.00	26.83
20734	CD2	TRP	D	327	-114.166	5.830	42.519	1.00	27.33
20735	CE3	TRP	D	327	-113.220	6.301	43.437	1.00	27.06
20736	CZ3	TRP	D	327	-112.683	5.415	44.363	1.00	24.99
20737	CH2	TRP	D	327	-113.075	4.090	44.402	1.00	24.28
20738	CZ2	TRP	D	327	-114.006	3.601	43.525	1.00	27.40
20739	C	TRP	D	327	-117.184	8.419	41.732	1.00	30.82
20740	O	TRP	D	327	-117.816	8.040	42.716	1.00	30.21
20741	N	VAL	D	328	-117.746	8.538	40.534	1.00	30.73
20742	CA	VAL	D	328	-119.154	8.176	40.359	1.00	30.65
20743	CB	VAL	D	328	-119.951	9.245	39.588	1.00	31.06
20744	CG1	VAL	D	328	-119.170	9.744	38.408	1.00	32.04
20745	CG2	VAL	D	328	-121.314	8.693	39.146	1.00	31.44
20746	C	VAL	D	328	-119.312	6.813	39.711	1.00	30.16
20747	O	VAL	D	328	-118.665	6.510	38.732	1.00	30.08

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 OQ**

A	B	C	D	E	F	G	H	I	J
20748	N	GLY	D	329	-120.186	5.987	40.274	1.00	30.55
20749	CA	GLY	D	329	-120.400	4.643	39.775	1.00	30.09
20750	C	GLY	D	329	-119.382	3.717	40.402	1.00	29.88
20751	O	GLY	D	329	-118.482	4.163	41.079	1.00	29.62
20752	N	ARG	D	330	-119.529	2.421	40.190	1.00	30.44
20753	CA	ARG	D	330	-118.546	1.486	40.709	1.00	31.33
20754	CB	ARG	D	330	-119.112	0.062	40.728	1.00	31.52
20755	CG	ARG	D	330	-120.301	-0.028	41.688	1.00	34.59
20756	CD	ARG	D	330	-120.522	-1.386	42.369	1.00	36.97
20757	NE	ARG	D	330	-121.713	-1.953	41.798	1.00	40.76
20758	CZ	ARG	D	330	-122.793	-2.312	42.475	1.00	40.18
20759	NH1	ARG	D	330	-123.830	-2.786	41.799	1.00	40.28
20760	NH2	ARG	D	330	-122.828	-2.238	43.798	1.00	37.97
20761	C	ARG	D	330	-117.284	1.636	39.864	1.00	31.13
20762	O	ARG	D	330	-116.205	1.879	40.394	1.00	30.90
20763	N	PHE	D	331	-117.454	1.558	38.548	1.00	31.06
20764	CA	PHE	D	331	-116.374	1.766	37.602	1.00	31.27
20765	CB	PHE	D	331	-116.087	0.487	36.823	1.00	30.73
20766	CG	PHE	D	331	-115.403	-0.544	37.647	1.00	29.04
20767	CD1	PHE	D	331	-114.038	-0.506	37.807	1.00	26.39
20768	CE1	PHE	D	331	-113.394	-1.437	38.585	1.00	26.15
20769	CZ	PHE	D	331	-114.124	-2.394	39.256	1.00	24.63
20770	CE2	PHE	D	331	-115.499	-2.430	39.114	1.00	26.77
20771	CD2	PHE	D	331	-116.132	-1.501	38.324	1.00	26.70
20772	C	PHE	D	331	-116.749	2.890	36.664	1.00	32.13
20773	O	PHE	D	331	-115.879	3.477	36.007	1.00	31.91
20774	N	ARG	D	332	-118.054	3.171	36.627	1.00	32.56
20775	CA	ARG	D	332	-118.651	4.236	35.823	1.00	33.59
20776	CB	ARG	D	332	-118.594	3.913	34.328	1.00	33.84
20777	CG	ARG	D	332	-119.441	2.731	33.895	1.00	35.39
20778	CD	ARG	D	332	-119.112	2.215	32.492	1.00	40.50
20779	NE	ARG	D	332	-118.171	1.088	32.510	1.00	44.31
20780	CZ	ARG	D	332	-116.870	1.169	32.764	1.00	44.10
20781	NH1	ARG	D	332	-116.299	2.332	33.022	1.00	44.56
20782	NH2	ARG	D	332	-116.135	0.069	32.762	1.00	45.36
20783	C	ARG	D	332	-120.109	4.435	36.233	1.00	34.05
20784	O	ARG	D	332	-120.723	3.563	36.855	1.00	33.55
20785	N	PRO	D	333	-120.662	5.598	35.912	1.00	34.68
20786	CA	PRO	D	333	-122.069	5.862	36.203	1.00	34.94
20787	CB	PRO	D	333	-122.335	7.136	35.409	1.00	35.03
20788	CG	PRO	D	333	-121.037	7.855	35.513	1.00	34.75
20789	CD	PRO	D	333	-119.997	6.769	35.314	1.00	34.69
20790	C	PRO	D	333	-122.946	4.706	35.747	1.00	35.45
20791	O	PRO	D	333	-122.688	4.066	34.737	1.00	35.18
20792	N	SER	D	334	-123.960	4.403	36.539	1.00	36.54
20793	CA	SER	D	334	-124.877	3.333	36.206	1.00	37.66
20794	CB	SER	D	334	-125.754	2.999	37.404	1.00	37.96
20795	OG	SER	D	334	-126.055	1.611	37.410	1.00	40.76
20796	C	SER	D	334	-125.771	3.720	35.025	1.00	38.00
20797	O	SER	D	334	-125.977	4.901	34.737	1.00	37.76
20798	N	GLU	D	335	-126.302	2.711	34.354	1.00	38.11

FIGURE 3 OR

A	B	C	D	E	F	G	H	I	J
20799	CA	GLU	D	335	-127.172	2.939	33.225	1.00	38.83
20800	CB	GLU	D	335	-126.944	1.848	32.169	1.00	39.12
20801	CG	GLU	D	335	-127.591	0.498	32.460	1.00	39.81
20802	CD	GLU	D	335	-126.907	-0.270	33.582	1.00	42.25
20803	OE1	GLU	D	335	-125.751	0.067	33.959	1.00	42.39
20804	OE2	GLU	D	335	-127.537	-1.220	34.092	1.00	42.00
20805	C	GLU	D	335	-128.647	2.999	33.649	1.00	39.02
20806	O	GLU	D	335	-129.097	2.264	34.537	1.00	38.91
20807	N	PRO	D	336	-129.416	3.857	32.996	1.00	39.27
20808	CA	PRO	D	336	-130.832	4.004	33.339	1.00	39.37
20809	CB	PRO	D	336	-131.230	5.306	32.641	1.00	39.23
20810	CG	PRO	D	336	-130.280	5.445	31.511	1.00	39.21
20811	CD	PRO	D	336	-129.014	4.724	31.878	1.00	39.11
20812	C	PRO	D	336	-131.668	2.885	32.775	1.00	39.43
20813	O	PRO	D	336	-131.364	2.369	31.712	1.00	39.27
20814	N	HIS	D	337	-132.711	2.509	33.505	1.00	40.02
20815	CA	HIS	D	337	-133.705	1.581	33.002	1.00	40.01
20816	CB	HIS	D	337	-133.788	0.347	33.889	1.00	39.87
20817	CG	HIS	D	337	-132.543	-0.481	33.843	1.00	39.02
20818	ND1	HIS	D	337	-132.445	-1.640	33.106	1.00	38.52
20819	CE1	HIS	D	337	-131.227	-2.136	33.223	1.00	36.68
20820	NE2	HIS	D	337	-130.525	-1.329	33.992	1.00	36.50
20821	CD2	HIS	D	337	-131.320	-0.279	34.385	1.00	37.82
20822	C	HIS	D	337	-135.009	2.353	32.920	1.00	40.66
20823	O	HIS	D	337	-135.621	2.685	33.935	1.00	41.07
20824	N	PHE	D	338	-135.405	2.675	31.693	1.00	41.13
20825	CA	PHE	D	338	-136.603	3.464	31.431	1.00	41.27
20826	CB	PHE	D	338	-136.482	4.185	30.079	1.00	40.88
20827	CG	PHE	D	338	-135.505	5.331	30.083	1.00	39.25
20828	CD1	PHE	D	338	-134.185	5.135	29.723	1.00	36.83
20829	CE1	PHE	D	338	-133.297	6.175	29.725	1.00	35.88
20830	CZ	PHE	D	338	-133.709	7.434	30.093	1.00	37.30
20831	CE2	PHE	D	338	-135.023	7.652	30.441	1.00	37.67
20832	CD2	PHE	D	338	-135.915	6.602	30.432	1.00	38.38
20833	C	PHE	D	338	-137.887	2.653	31.436	1.00	42.05
20834	O	PHE	D	338	-137.921	1.475	31.058	1.00	42.03
20835	N	THR	D	339	-138.956	3.301	31.872	1.00	43.22
20836	CA	THR	D	339	-140.281	2.714	31.779	1.00	44.21
20837	CB	THR	D	339	-141.266	3.557	32.566	1.00	44.18
20838	OG1	THR	D	339	-140.957	4.942	32.356	1.00	45.08
20839	CG2	THR	D	339	-141.018	3.391	34.056	1.00	44.83
20840	C	THR	D	339	-140.621	2.769	30.300	1.00	44.64
20841	O	THR	D	339	-140.049	3.565	29.565	1.00	44.48
20842	N	LEU	D	340	-141.544	1.929	29.859	1.00	45.84
20843	CA	LEU	D	340	-141.910	1.885	28.451	1.00	46.69
20844	CB	LEU	D	340	-143.196	1.089	28.250	1.00	46.97
20845	CG	LEU	D	340	-143.203	0.251	26.964	1.00	48.22
20846	CD1	LEU	D	340	-142.944	-1.233	27.257	1.00	49.71
20847	CD2	LEU	D	340	-142.182	0.783	25.975	1.00	47.97
20848	C	LEU	D	340	-142.050	3.280	27.841	1.00	46.96
20849	O	LEU	D	340	-141.341	3.626	26.890	1.00	47.27

FIGURE 3 OS

A	B	C	D	E	F	G	H	I	J
20850	N	ASP	D	341	-142.942	4.086	28.402	1.00	47.11
20851	CA	ASP	D	341	-143.190	5.430	27.884	1.00	47.34
20852	CB	ASP	D	341	-144.350	6.100	28.632	1.00	47.48
20853	CG	ASP	D	341	-144.042	6.333	30.099	1.00	49.18
20854	OD1	ASP	D	341	-145.000	6.577	30.873	1.00	49.68
20855	OD2	ASP	D	341	-142.878	6.292	30.570	1.00	50.47
20856	C	ASP	D	341	-141.972	6.331	27.952	1.00	46.95
20857	O	ASP	D	341	-141.967	7.411	27.368	1.00	47.08
20858	N	GLY	D	342	-140.960	5.910	28.701	1.00	46.48
20859	CA	GLY	D	342	-139.740	6.683	28.824	1.00	45.70
20860	C	GLY	D	342	-139.868	7.998	29.566	1.00	45.41
20861	O	GLY	D	342	-139.019	8.880	29.432	1.00	45.37
20862	N	ASN	D	343	-140.917	8.159	30.360	1.00	45.22
20863	CA	ASN	D	343	-141.043	9.411	31.106	1.00	44.83
20864	CB	ASN	D	343	-142.503	9.846	31.210	1.00	45.19
20865	CG	ASN	D	343	-143.140	10.063	29.847	1.00	46.90
20866	OD1	ASN	D	343	-142.536	10.666	28.960	1.00	48.47
20867	ND2	ASN	D	343	-144.363	9.564	29.671	1.00	48.14
20868	C	ASN	D	343	-140.353	9.333	32.477	1.00	43.86
20869	O	ASN	D	343	-140.230	10.321	33.204	1.00	43.78
20870	N	SER	D	344	-139.891	8.149	32.827	1.00	42.61
20871	CA	SER	D	344	-139.156	8.011	34.070	1.00	42.35
20872	CB	SER	D	344	-140.093	7.952	35.291	1.00	41.77
20873	OG	SER	D	344	-141.020	6.891	35.185	1.00	42.32
20874	C	SER	D	344	-138.243	6.800	33.961	1.00	41.77
20875	O	SER	D	344	-138.322	6.038	32.991	1.00	41.99
20876	N	PHE	D	345	-137.370	6.627	34.945	1.00	41.31
20877	CA	PHE	D	345	-136.408	5.538	34.893	1.00	40.19
20878	CB	PHE	D	345	-135.244	5.900	33.964	1.00	39.91
20879	CG	PHE	D	345	-134.382	7.017	34.473	1.00	38.04
20880	CD1	PHE	D	345	-133.315	6.760	35.316	1.00	37.16
20881	CE1	PHE	D	345	-132.519	7.787	35.775	1.00	36.17
20882	CZ	PHE	D	345	-132.778	9.077	35.392	1.00	34.87
20883	CE2	PHE	D	345	-133.830	9.339	34.545	1.00	35.78
20884	CD2	PHE	D	345	-134.622	8.319	34.092	1.00	35.52
20885	C	PHE	D	345	-135.865	5.134	36.247	1.00	40.24
20886	O	PHE	D	345	-136.029	5.839	37.247	1.00	39.97
20887	N	TYR	D	346	-135.213	3.974	36.246	1.00	40.03
20888	CA	TYR	D	346	-134.591	3.418	37.413	1.00	40.01
20889	CB	TYR	D	346	-135.129	2.016	37.656	1.00	40.29
20890	CG	TYR	D	346	-136.615	1.958	37.902	1.00	41.07
20891	CD1	TYR	D	346	-137.119	2.044	39.184	1.00	39.92
20892	CE1	TYR	D	346	-138.467	1.984	39.418	1.00	42.29
20893	CZ	TYR	D	346	-139.342	1.837	38.364	1.00	43.21
20894	OH	TYR	D	346	-140.693	1.778	38.616	1.00	42.09
20895	CE2	TYR	D	346	-138.865	1.752	37.065	1.00	42.81
20896	CD2	TYR	D	346	-137.511	1.809	36.844	1.00	41.55
20897	C	TYR	D	346	-133.087	3.327	37.186	1.00	40.23
20898	O	TYR	D	346	-132.629	3.013	36.074	1.00	39.81
20899	N	LYS	D	347	-132.318	3.632	38.226	1.00	39.63
20900	CA	LYS	D	347	-130.878	3.421	38.167	1.00	39.76

FIGURE 3 OT

A	B	C	D	E	F	G	H	I	J
20901	CB	LYS	D	347	-130.147	4.386	37.211	1.00	39.79
20902	CG	LYS	D	347	-129.986	5.789	37.683	1.00	39.95
20903	CD	LYS	D	347	-128.535	6.088	37.930	1.00	41.81
20904	CE	LYS	D	347	-127.839	6.780	36.751	1.00	40.24
20905	NZ	LYS	D	347	-126.343	6.794	36.995	1.00	37.48
20906	C	LYS	D	347	-130.264	3.386	39.556	1.00	39.41
20907	O	LYS	D	347	-130.791	3.966	40.510	1.00	39.41
20908	N	ILE	D	348	-129.164	2.658	39.647	1.00	38.65
20909	CA	ILE	D	348	-128.466	2.465	40.888	1.00	38.14
20910	CB	ILE	D	348	-127.664	1.167	40.798	1.00	37.90
20911	CG1	ILE	D	348	-128.572	0.058	40.260	1.00	36.13
20912	CD1	ILE	D	348	-127.878	-1.248	40.028	1.00	34.90
20913	CG2	ILE	D	348	-127.068	0.819	42.155	1.00	37.06
20914	C	ILE	D	348	-127.538	3.621	41.156	1.00	38.53
20915	O	ILE	D	348	-126.674	3.938	40.337	1.00	39.14
20916	N	ILE	D	349	-127.734	4.257	42.302	1.00	38.29
20917	CA	ILE	D	349	-126.870	5.317	42.759	1.00	37.95
20918	CB	ILE	D	349	-127.530	6.679	42.605	1.00	38.25
20919	CG1	ILE	D	349	-128.665	6.828	43.609	1.00	38.68
20920	CD1	ILE	D	349	-129.020	8.269	43.923	1.00	39.44
20921	CG2	ILE	D	349	-128.003	6.898	41.177	1.00	38.73
20922	C	ILE	D	349	-126.587	5.053	44.229	1.00	37.73
20923	O	ILE	D	349	-127.292	4.278	44.876	1.00	37.75
20924	N	SER	D	350	-125.536	5.671	44.747	1.00	37.22
20925	CA	SER	D	350	-125.188	5.486	46.133	1.00	37.43
20926	CB	SER	D	350	-123.757	5.952	46.391	1.00	37.24
20927	OG	SER	D	350	-123.712	7.367	46.324	1.00	39.73
20928	C	SER	D	350	-126.163	6.328	46.922	1.00	36.70
20929	O	SER	D	350	-126.408	7.479	46.562	1.00	36.34
20930	N	ASN	D	351	-126.743	5.757	47.975	1.00	36.35
20931	CA	ASN	D	351	-127.699	6.523	48.782	1.00	36.49
20932	CB	ASN	D	351	-128.791	5.650	49.423	1.00	35.93
20933	CG	ASN	D	351	-128.255	4.665	50.461	1.00	36.10
20934	OD1	ASN	D	351	-127.105	4.750	50.903	1.00	35.57
20935	ND2	ASN	D	351	-129.109	3.725	50.866	1.00	33.75
20936	C	ASN	D	351	-127.004	7.410	49.798	1.00	36.80
20937	O	ASN	D	351	-125.790	7.622	49.724	1.00	36.43
20938	N	GLU	D	352	-127.775	7.933	50.736	1.00	37.42
20939	CA	GLU	D	352	-127.230	8.849	51.720	1.00	38.62
20940	CB	GLU	D	352	-128.349	9.455	52.568	1.00	39.24
20941	CG	GLU	D	352	-128.946	8.502	53.600	1.00	42.95
20942	CD	GLU	D	352	-129.651	7.298	52.982	1.00	47.08
20943	OE1	GLU	D	352	-129.544	6.204	53.585	1.00	47.83
20944	OE2	GLU	D	352	-130.318	7.442	51.911	1.00	48.18
20945	C	GLU	D	352	-126.189	8.181	52.612	1.00	38.18
20946	O	GLU	D	352	-125.279	8.840	53.104	1.00	38.32
20947	N	GLU	D	353	-126.310	6.871	52.795	1.00	37.68
20948	CA	GLU	D	353	-125.397	6.154	53.658	1.00	37.20
20949	CB	GLU	D	353	-126.138	5.092	54.501	1.00	37.96
20950	CG	GLU	D	353	-127.264	4.362	53.789	1.00	41.29
20951	CD	GLU	D	353	-127.688	3.060	54.474	1.00	46.35

FIGURE 3 OU

A	B	C	D	E	F	G	H	I	J
20952	OE1	GLU	D	353	-127.325	2.860	55.670	1.00	47.37
20953	OE2	GLU	D	353	-128.383	2.232	53.808	1.00	46.05
20954	C	GLU	D	353	-124.210	5.553	52.892	1.00	36.18
20955	O	GLU	D	353	-123.335	4.912	53.489	1.00	35.36
20956	N	GLY	D	354	-124.186	5.770	51.577	1.00	35.03
20957	CA	GLY	D	354	-123.124	5.260	50.724	1.00	33.33
20958	C	GLY	D	354	-123.372	3.874	50.161	1.00	32.88
20959	O	GLY	D	354	-122.454	3.244	49.633	1.00	32.29
20960	N	TYR	D	355	-124.602	3.380	50.283	1.00	32.37
20961	CA	TYR	D	355	-124.930	2.069	49.739	1.00	32.40
20962	CB	TYR	D	355	-125.689	1.188	50.740	1.00	32.12
20963	CG	TYR	D	355	-124.851	0.734	51.906	1.00	32.12
20964	CD1	TYR	D	355	-124.691	1.537	53.026	1.00	31.66
20965	CE1	TYR	D	355	-123.924	1.128	54.105	1.00	31.91
20966	CZ	TYR	D	355	-123.299	-0.102	54.070	1.00	34.47
20967	OH	TYR	D	355	-122.525	-0.514	55.145	1.00	35.16
20968	CE2	TYR	D	355	-123.449	-0.929	52.966	1.00	33.95
20969	CD2	TYR	D	355	-124.219	-0.504	51.890	1.00	33.48
20970	C	TYR	D	355	-125.719	2.231	48.453	1.00	32.36
20971	O	TYR	D	355	-126.611	3.074	48.355	1.00	32.46
20972	N	ARG	D	356	-125.366	1.415	47.468	1.00	32.22
20973	CA	ARG	D	356	-125.976	1.480	46.145	1.00	32.23
20974	CB	ARG	D	356	-124.989	0.944	45.094	1.00	32.13
20975	CG	ARG	D	356	-123.887	1.975	44.815	1.00	32.43
20976	CD	ARG	D	356	-122.617	1.473	44.134	1.00	32.47
20977	NE	ARG	D	356	-121.497	2.343	44.491	1.00	31.76
20978	CZ	ARG	D	356	-121.250	3.533	43.940	1.00	30.21
20979	NH1	ARG	D	356	-122.022	4.006	42.967	1.00	29.24
20980	NH2	ARG	D	356	-120.218	4.249	44.363	1.00	29.43
20981	C	ARG	D	356	-127.349	0.811	46.066	1.00	31.78
20982	O	ARG	D	356	-127.493	-0.386	46.273	1.00	31.54
20983	N	HIS	D	357	-128.357	1.612	45.760	1.00	31.98
20984	CA	HIS	D	357	-129.733	1.128	45.714	1.00	31.67
20985	CB	HIS	D	357	-130.457	1.465	47.018	1.00	30.76
20986	CG	HIS	D	357	-130.002	0.621	48.158	1.00	29.54
20987	ND1	HIS	D	357	-130.369	-0.697	48.287	1.00	26.68
20988	CE1	HIS	D	357	-129.787	-1.209	49.355	1.00	26.99
20989	NE2	HIS	D	357	-129.026	-0.278	49.901	1.00	27.44
20990	CD2	HIS	D	357	-129.133	0.873	49.166	1.00	27.84
20991	C	HIS	D	357	-130.501	1.658	44.520	1.00	31.96
20992	O	HIS	D	357	-130.075	2.603	43.875	1.00	31.35
20993	N	ILE	D	358	-131.623	1.017	44.224	1.00	33.06
20994	CA	ILE	D	358	-132.426	1.430	43.096	1.00	34.50
20995	CB	ILE	D	358	-133.421	0.356	42.695	1.00	34.42
20996	CG1	ILE	D	358	-132.706	-0.982	42.472	1.00	34.74
20997	CD1	ILE	D	358	-133.628	-2.206	42.569	1.00	34.80
20998	CG2	ILE	D	358	-134.182	0.824	41.448	1.00	33.43
20999	C	ILE	D	358	-133.176	2.708	43.417	1.00	35.42
21000	O	ILE	D	358	-133.907	2.791	44.408	1.00	34.47
21001	N	CYS	D	359	-132.985	3.707	42.569	1.00	36.85
21002	CA	CYS	D	359	-133.674	4.960	42.762	1.00	38.92



FIGURE 3 OV

A	B	C	D	E	F	G	H	I	J
21003	CB	CYS	D	359	-132.691	6.097	43.006	1.00	39.01
21004	SG	CYS	D	359	-133.467	7.398	43.960	1.00	43.67
21005	C	CYS	D	359	-134.542	5.238	41.548	1.00	39.33
21006	O	CYS	D	359	-134.168	4.922	40.421	1.00	39.71
21007	N	TYR	D	360	-135.709	5.818	41.787	1.00	40.18
21008	CA	TYR	D	360	-136.653	6.101	40.725	1.00	41.13
21009	CB	TYR	D	360	-138.042	5.660	41.159	1.00	41.22
21010	CG	TYR	D	360	-139.166	6.012	40.211	1.00	40.71
21011	CD1	TYR	D	360	-140.043	7.046	40.504	1.00	41.69
21012	CE1	TYR	D	360	-141.079	7.362	39.658	1.00	41.04
21013	CZ	TYR	D	360	-141.259	6.625	38.509	1.00	41.55
21014	OH	TYR	D	360	-142.305	6.928	37.670	1.00	43.38
21015	CE2	TYR	D	360	-140.409	5.590	38.197	1.00	40.33
21016	CD2	TYR	D	360	-139.372	5.288	39.048	1.00	40.26
21017	C	TYR	D	360	-136.644	7.585	40.394	1.00	41.84
21018	O	TYR	D	360	-136.754	8.425	41.275	1.00	41.85
21019	N	PHE	D	361	-136.485	7.897	39.116	1.00	42.94
21020	CA	PHE	D	361	-136.450	9.275	38.665	1.00	43.88
21021	CB	PHE	D	361	-135.155	9.578	37.894	1.00	43.94
21022	CG	PHE	D	361	-133.895	9.448	38.703	1.00	43.65
21023	CD1	PHE	D	361	-133.156	10.578	39.038	1.00	43.59
21024	CE1	PHE	D	361	-131.985	10.466	39.784	1.00	43.67
21025	CZ	PHE	D	361	-131.534	9.222	40.177	1.00	42.46
21026	CE2	PHE	D	361	-132.258	8.088	39.839	1.00	43.24
21027	CD2	PHE	D	361	-133.429	8.204	39.101	1.00	42.70
21028	C	PHE	D	361	-137.572	9.475	37.679	1.00	44.95
21029	O	PHE	D	361	-137.972	8.539	36.977	1.00	44.82
21030	N	GLN	D	362	-138.062	10.708	37.620	1.00	46.06
21031	CA	GLN	D	362	-139.001	11.116	36.594	1.00	47.40
21032	CB	GLN	D	362	-140.239	11.791	37.189	1.00	47.36
21033	CG	GLN	D	362	-141.040	10.943	38.162	1.00	48.74
21034	CD	GLN	D	362	-142.243	11.700	38.711	1.00	51.25
21035	OE1	GLN	D	362	-143.331	11.614	38.153	1.00	53.12
21036	NE2	GLN	D	362	-142.042	12.461	39.783	1.00	51.45
21037	C	GLN	D	362	-138.242	12.105	35.715	1.00	48.00
21038	O	GLN	D	362	-137.580	13.015	36.215	1.00	47.59
21039	N	ILE	D	363	-138.328	11.903	34.408	1.00	49.43
21040	CA	ILE	D	363	-137.646	12.751	33.437	1.00	50.89
21041	CB	ILE	D	363	-138.367	12.644	32.077	1.00	50.91
21042	CG1	ILE	D	363	-138.066	11.290	31.444	1.00	51.01
21043	CD1	ILE	D	363	-136.852	10.613	32.006	1.00	49.39
21044	CG2	ILE	D	363	-137.957	13.739	31.136	1.00	51.62
21045	C	ILE	D	363	-137.547	14.203	33.890	1.00	51.81
21046	O	ILE	D	363	-136.458	14.781	33.911	1.00	51.94
21047	N	ASP	D	364	-138.676	14.776	34.295	1.00	53.26
21048	CA	ASP	D	364	-138.744	16.195	34.652	1.00	54.63
21049	CB	ASP	D	364	-140.059	16.794	34.133	1.00	55.08
21050	CG	ASP	D	364	-139.984	17.194	32.661	1.00	57.13
21051	OD1	ASP	D	364	-139.101	18.014	32.315	1.00	58.88
21052	OD2	ASP	D	364	-140.764	16.755	31.780	1.00	57.86
21053	C	ASP	D	364	-138.566	16.573	36.132	1.00	55.15

FIGURE 3 OW

A	B	C	D	E	F	G	H	I	J
21054	O	ASP	D	364	-138.963	17.669	36.535	1.00	55.15
21055	N	LYS	D	365	-137.984	15.697	36.948	1.00	55.72
21056	CA	LYS	D	365	-137.769	16.058	38.353	1.00	56.38
21057	CB	LYS	D	365	-138.896	15.533	39.259	1.00	56.83
21058	CG	LYS	D	365	-138.517	14.404	40.224	1.00	58.36
21059	CD	LYS	D	365	-139.686	14.082	41.174	1.00	60.14
21060	CE	LYS	D	365	-139.278	13.174	42.340	1.00	60.85
21061	NZ	LYS	D	365	-138.816	11.802	41.920	1.00	60.80
21062	C	LYS	D	365	-136.390	15.655	38.866	1.00	56.32
21063	O	LYS	D	365	-135.920	14.538	38.636	1.00	56.59
21064	N	LYS	D	366	-135.741	16.576	39.562	1.00	56.14
21065	CA	LYS	D	366	-134.393	16.336	40.054	1.00	55.94
21066	CB	LYS	D	366	-133.793	17.628	40.616	1.00	56.24
21067	CG	LYS	D	366	-134.448	18.115	41.896	1.00	57.54
21068	CD	LYS	D	366	-133.819	19.422	42.372	1.00	59.43
21069	CE	LYS	D	366	-134.168	19.709	43.827	1.00	60.48
21070	NZ	LYS	D	366	-135.641	19.679	44.075	1.00	60.65
21071	C	LYS	D	366	-134.320	15.228	41.103	1.00	55.23
21072	O	LYS	D	366	-133.440	14.363	41.050	1.00	55.28
21073	N	ASP	D	367	-135.246	15.241	42.051	1.00	54.04
21074	CA	ASP	D	367	-135.168	14.285	43.143	1.00	52.89
21075	CB	ASP	D	367	-135.850	14.821	44.396	1.00	53.20
21076	CG	ASP	D	367	-134.996	15.825	45.113	1.00	55.19
21077	OD1	ASP	D	367	-135.382	17.009	45.151	1.00	58.14
21078	OD2	ASP	D	367	-133.909	15.526	45.658	1.00	58.60
21079	C	ASP	D	367	-135.706	12.930	42.762	1.00	51.23
21080	O	ASP	D	367	-136.645	12.824	41.994	1.00	51.45
21081	N	CYS	D	368	-135.092	11.892	43.307	1.00	49.15
21082	CA	CYS	D	368	-135.492	10.543	42.984	1.00	47.27
21083	CB	CYS	D	368	-134.342	9.810	42.294	1.00	46.98
21084	SG	CYS	D	368	-133.021	9.288	43.413	1.00	45.43
21085	C	CYS	D	368	-135.843	9.847	44.277	1.00	46.24
21086	O	CYS	D	368	-135.321	10.190	45.330	1.00	46.58
21087	N	THR	D	369	-136.728	8.870	44.223	1.00	44.70
21088	CA	THR	D	369	-137.032	8.175	45.449	1.00	43.62
21089	CB	THR	D	369	-138.550	8.155	45.725	1.00	43.82
21090	OG1	THR	D	369	-139.124	6.964	45.188	1.00	44.95
21091	CG2	THR	D	369	-139.239	9.272	44.967	1.00	43.26
21092	C	THR	D	369	-136.434	6.778	45.429	1.00	42.15
21093	O	THR	D	369	-136.496	6.065	44.427	1.00	41.55
21094	N	PHE	D	370	-135.820	6.406	46.539	1.00	40.33
21095	CA	PHE	D	370	-135.249	5.084	46.648	1.00	39.06
21096	CB	PHE	D	370	-134.193	5.065	47.736	1.00	39.01
21097	CG	PHE	D	370	-132.869	5.591	47.284	1.00	38.24
21098	CD1	PHE	D	370	-132.082	4.851	46.425	1.00	36.86
21099	CE1	PHE	D	370	-130.850	5.339	46.006	1.00	38.06
21100	CZ	PHE	D	370	-130.416	6.581	46.447	1.00	38.00
21101	CR2	PHE	D	370	-131.208	7.329	47.288	1.00	37.11
21102	CD2	PHE	D	370	-132.423	6.833	47.705	1.00	36.95
21103	C	PHE	D	370	-136.321	4.045	46.931	1.00	38.31
21104	O	PHE	D	370	-137.207	4.276	47.764	1.00	38.16

FIGURE 3 OX

A	B	C	D	E	F	G	H	I	J
21105	N	ILE	D	371	-136.240	2.917	46.230	1.00	37.20
21106	CA	ILE	D	371	-137.180	1.816	46.422	1.00	36.77
21107	CB	ILE	D	371	-137.987	1.519	45.138	1.00	37.01
21108	CG1	ILE	D	371	-137.074	1.012	44.018	1.00	35.43
21109	CD1	ILE	D	371	-137.820	0.462	42.837	1.00	36.70
21110	CG2	ILE	D	371	-138.800	2.760	44.735	1.00	36.00
21111	C	ILE	D	371	-136.523	0.547	46.981	1.00	36.79
21112	O	ILE	D	371	-137.205	-0.458	47.188	1.00	36.99
21113	N	THR	D	372	-135.201	0.598	47.178	1.00	36.34
21114	CA	THR	D	372	-134.463	-0.395	47.972	1.00	36.04
21115	CB	THR	D	372	-133.588	-1.382	47.132	1.00	36.42
21116	OG1	THR	D	372	-132.577	-0.668	46.400	1.00	35.44
21117	CG2	THR	D	372	-134.422	-2.105	46.067	1.00	35.39
21118	C	THR	D	372	-133.574	0.376	48.943	1.00	35.99
21119	O	THR	D	372	-133.235	1.539	48.698	1.00	36.01
21120	N	LYS	D	373	-133.232	-0.251	50.062	1.00	35.71
21121	CA	LYS	D	373	-132.320	0.342	51.037	1.00	35.84
21122	CB	LYS	D	373	-132.988	1.458	51.828	1.00	36.44
21123	CG	LYS	D	373	-134.476	1.226	52.094	1.00	38.82
21124	CD	LYS	D	373	-134.836	1.498	53.548	1.00	41.22
21125	CE	LYS	D	373	-134.428	2.895	53.983	1.00	43.73
21126	NZ	LYS	D	373	-134.720	3.181	55.429	1.00	45.05
21127	C	LYS	D	373	-131.843	-0.723	51.984	1.00	35.25
21128	O	LYS	D	373	-132.353	-1.838	51.978	1.00	35.89
21129	N	GLY	D	374	-130.876	-0.374	52.819	1.00	34.90
21130	CA	GLY	D	374	-130.309	-1.310	53.769	1.00	33.91
21131	C	GLY	D	374	-128.803	-1.356	53.581	1.00	33.63
21132	O	GLY	D	374	-128.269	-0.778	52.634	1.00	33.52
21133	N	THR	D	375	-128.109	-2.039	54.480	1.00	33.26
21134	CA	THR	D	375	-126.653	-2.159	54.384	1.00	32.63
21135	CB	THR	D	375	-126.040	-2.305	55.781	1.00	32.98
21136	OG1	THR	D	375	-126.429	-3.572	56.321	1.00	34.19
21137	CG2	THR	D	375	-126.673	-1.306	56.754	1.00	32.80
21138	C	THR	D	375	-126.245	-3.349	53.518	1.00	31.50
21139	O	THR	D	375	-125.699	-4.329	54.010	1.00	31.37
21140	N	TRP	D	376	-126.510	-3.236	52.225	1.00	30.27
21141	CA	TRP	D	376	-126.162	-4.251	51.237	1.00	29.82
21142	CB	TRP	D	376	-127.086	-5.479	51.284	1.00	29.57
21143	CG	TRP	D	376	-128.550	-5.157	51.340	1.00	29.97
21144	CD1	TRP	D	376	-129.298	-4.950	52.460	1.00	31.52
21145	NE1	TRP	D	376	-130.600	-4.668	52.117	1.00	33.29
21146	CE2	TRP	D	376	-130.715	-4.688	50.753	1.00	31.81
21147	CD2	TRP	D	376	-129.441	-4.988	50.229	1.00	31.04
21148	CE3	TRP	D	376	-129.295	-5.079	48.836	1.00	30.24
21149	CZ3	TRP	D	376	-130.386	-4.847	48.034	1.00	30.33
21150	CH2	TRP	D	376	-131.652	-4.560	48.586	1.00	31.76
21151	CZ2	TRP	D	376	-131.833	-4.473	49.938	1.00	32.25
21152	C	TRP	D	376	-126.329	-3.507	49.933	1.00	29.40
21153	O	TRP	D	376	-126.797	-2.374	49.941	1.00	28.79
21154	N	GLU	D	377	-125.952	-4.118	48.816	1.00	29.03
21155	CA	GLU	D	377	-126.019	-3.384	47.549	1.00	28.80

FIGURE 3 OY

A	B	C	D	E	F	G	H	I	J
21156	CB	GLU	D	377	-124.599	-2.991	47.099	1.00	28.09
21157	CG	GLU	D	377	-123.911	-2.015	48.046	1.00	27.76
21158	CD	GLU	D	377	-122.815	-1.214	47.377	1.00	28.36
21159	OE1	GLU	D	377	-122.572	-0.067	47.780	1.00	29.76
21160	OE2	GLU	D	377	-122.193	-1.719	46.434	1.00	30.38
21161	C	GLU	D	377	-126.736	-4.089	46.404	1.00	28.45
21162	O	GLU	D	377	-126.595	-5.289	46.214	1.00	28.24
21163	N	VAL	D	378	-127.495	-3.331	45.626	1.00	29.21
21164	CA	VAL	D	378	-128.045	-3.871	44.395	1.00	29.24
21165	CB	VAL	D	378	-129.146	-2.978	43.833	1.00	29.41
21166	CG1	VAL	D	378	-129.580	-3.458	42.426	1.00	28.44
21167	CG2	VAL	D	378	-130.343	-2.924	44.807	1.00	28.31
21168	C	VAL	D	378	-126.878	-3.964	43.422	1.00	30.44
21169	O	VAL	D	378	-126.092	-3.033	43.294	1.00	29.80
21170	N	ILE	D	379	-126.746	-5.100	42.750	1.00	32.28
21171	CA	ILE	D	379	-125.628	-5.307	41.840	1.00	33.52
21172	CB	ILE	D	379	-125.220	-6.788	41.831	1.00	33.68
21173	CG1	ILE	D	379	-124.879	-7.260	43.244	1.00	33.80
21174	CD1	ILE	D	379	-123.922	-6.369	43.973	1.00	33.48
21175	CG2	ILE	D	379	-124.049	-7.015	40.887	1.00	34.15
21176	C	ILE	D	379	-126.015	-4.856	40.445	1.00	34.25
21177	O	ILE	D	379	-125.215	-4.251	39.725	1.00	34.43
21178	N	GLY	D	380	-127.248	-5.155	40.062	1.00	34.97
21179	CA	GLY	D	380	-127.748	-4.709	38.778	1.00	36.19
21180	C	GLY	D	380	-129.244	-4.880	38.609	1.00	36.82
21181	O	GLY	D	380	-129.809	-5.825	39.117	1.00	37.70
21182	N	ILE	D	381	-129.890	-3.944	37.921	1.00	37.55
21183	CA	ILE	D	381	-131.277	-4.109	37.545	1.00	37.88
21184	CB	ILE	D	381	-131.877	-2.772	37.160	1.00	38.08
21185	CG1	ILE	D	381	-132.109	-1.923	38.413	1.00	38.21
21186	CD1	ILE	D	381	-132.224	-0.427	38.137	1.00	37.59
21187	CG2	ILE	D	381	-133.182	-2.981	36.381	1.00	36.96
21188	C	ILE	D	381	-131.256	-5.024	36.330	1.00	38.84
21189	O	ILE	D	381	-130.627	-4.711	35.317	1.00	38.87
21190	N	GLU	D	382	-131.941	-6.155	36.427	1.00	39.49
21191	CA	GLU	D	382	-131.914	-7.145	35.365	1.00	40.28
21192	CB	GLU	D	382	-131.826	-8.554	35.971	1.00	40.16
21193	CG	GLU	D	382	-130.637	-8.763	36.888	1.00	40.99
21194	CD	GLU	D	382	-129.303	-8.422	36.241	1.00	42.81
21195	OE1	GLU	D	382	-129.076	-8.797	35.068	1.00	43.56
21196	OE2	GLU	D	382	-128.479	-7.764	36.908	1.00	43.93
21197	C	GLU	D	382	-133.100	-7.061	34.407	1.00	40.86
21198	O	GLU	D	382	-132.973	-7.374	33.225	1.00	41.14
21199	N	ALA	D	383	-134.259	-6.657	34.913	1.00	41.59
21200	CA	ALA	D	383	-135.447	-6.544	34.064	1.00	41.83
21201	CB	ALA	D	383	-136.094	-7.913	33.851	1.00	41.83
21202	C	ALA	D	383	-136.479	-5.576	34.615	1.00	42.32
21203	O	ALA	D	383	-136.538	-5.296	35.825	1.00	41.93
21204	N	LEU	D	384	-137.313	-5.095	33.703	1.00	42.65
21205	CA	LEU	D	384	-138.372	-4.178	34.032	1.00	43.03
21206	CB	LEU	D	384	-137.961	-2.777	33.617	1.00	42.90

FIGURE 3 OZ

A	B	C	D	E	F	G	H	I	J
21207	CG	LEU	D	384	-138.924	-1.652	33.979	1.00	42.15
21208	CD1	LEU	D	384	-139.173	-1.634	35.484	1.00	41.21
21209	CD2	LEU	D	384	-138.338	-0.343	33.531	1.00	41.42
21210	C	LEU	D	384	-139.614	-4.564	33.262	1.00	43.77
21211	O	LEU	D	384	-139.553	-4.837	32.076	1.00	44.19
21212	N	THR	D	385	-140.747	-4.621	33.939	1.00	44.51
21213	CA	THR	D	385	-142.009	-4.822	33.251	1.00	44.99
21214	CB	THR	D	385	-142.612	-6.190	33.558	1.00	45.20
21215	OG1	THR	D	385	-142.895	-6.281	34.960	1.00	45.54
21216	CG2	THR	D	385	-141.596	-7.305	33.304	1.00	44.70
21217	C	THR	D	385	-142.891	-3.722	33.785	1.00	45.45
21218	O	THR	D	385	-142.424	-2.877	34.542	1.00	45.63
21219	N	SER	D	386	-144.161	-3.699	33.401	1.00	46.00
21220	CA	SER	D	386	-145.027	-2.641	33.912	1.00	46.09
21221	CB	SER	D	386	-146.253	-2.430	33.010	1.00	46.35
21222	OG	SER	D	386	-146.907	-3.659	32.748	1.00	47.43
21223	C	SER	D	386	-145.439	-2.985	35.338	1.00	45.73
21224	O	SER	D	386	-145.896	-2.118	36.083	1.00	45.55
21225	N	ASP	D	387	-145.253	-4.251	35.710	1.00	45.25
21226	CA	ASP	D	387	-145.595	-4.715	37.046	1.00	45.10
21227	CB	ASP	D	387	-146.446	-5.976	36.958	1.00	45.39
21228	CG	ASP	D	387	-147.721	-5.776	36.151	1.00	45.79
21229	OD1	ASP	D	387	-148.334	-4.682	36.233	1.00	44.47
21230	OD2	ASP	D	387	-148.181	-6.676	35.410	1.00	45.75
21231	C	ASP	D	387	-144.397	-5.010	37.960	1.00	45.22
21232	O	ASP	D	387	-144.522	-4.927	39.187	1.00	45.43
21233	N	TYR	D	388	-143.242	-5.345	37.380	1.00	44.50
21234	CA	TYR	D	388	-142.109	-5.781	38.187	1.00	43.85
21235	CB	TYR	D	388	-142.089	-7.300	38.221	1.00	44.23
21236	CG	TYR	D	388	-143.153	-7.910	39.090	1.00	46.90
21237	CD1	TYR	D	388	-144.206	-8.626	38.533	1.00	48.02
21238	CE1	TYR	D	388	-145.177	-9.190	39.331	1.00	49.82
21239	CZ	TYR	D	388	-145.108	-9.039	40.702	1.00	51.59
21240	OH	TYR	D	388	-146.076	-9.596	41.510	1.00	53.43
21241	CE2	TYR	D	388	-144.068	-8.339	41.279	1.00	50.92
21242	CD2	TYR	D	388	-143.099	-7.779	40.473	1.00	49.24
21243	C	TYR	D	388	-140.715	-5.330	37.760	1.00	42.89
21244	O	TYR	D	388	-140.366	-5.372	36.580	1.00	43.06
21245	N	LEU	D	389	-139.916	-4.942	38.753	1.00	41.19
21246	CA	LEU	D	389	-138.507	-4.614	38.567	1.00	39.23
21247	CB	LEU	D	389	-138.156	-3.339	39.334	1.00	39.32
21248	CG	LEU	D	389	-136.716	-2.789	39.446	1.00	39.19
21249	CD1	LEU	D	389	-135.648	-3.859	39.256	1.00	38.76
21250	CD2	LEU	D	389	-136.476	-1.627	38.500	1.00	36.57
21251	C	LEU	D	389	-137.727	-5.792	39.132	1.00	37.99
21252	O	LEU	D	389	-137.870	-6.117	40.310	1.00	37.64
21253	N	TYR	D	390	-136.944	-6.454	38.284	1.00	36.44
21254	CA	TYR	D	390	-136.096	-7.572	38.702	1.00	35.27
21255	CB	TYR	D	390	-136.120	-8.667	37.640	1.00	35.32
21256	CG	TYR	D	390	-137.462	-9.355	37.489	1.00	35.78
21257	CD1	TYR	D	390	-137.705	-10.594	38.077	1.00	35.03

FIGURE 3 PA

A	B	C	D	E	F	G	H	I	J
21258	CE1	TYR	D	390	-138.926	-11.219	37.931	1.00	35.62
21259	CZ	TYR	D	390	-139.923	-10.606	37.194	1.00	36.94
21260	OH	TYR	D	390	-141.154	-11.213	37.040	1.00	38.72
21261	CE2	TYR	D	390	-139.700	-9.386	36.600	1.00	36.15
21262	CD2	TYR	D	390	-138.479	-8.768	36.752	1.00	34.64
21263	C	TYR	D	390	-134.640	-7.111	38.932	1.00	34.37
21264	O	TYR	D	390	-134.089	-6.366	38.121	1.00	33.74
21265	N	TYR	D	391	-134.021	-7.532	40.032	1.00	33.78
21266	CA	TYR	D	391	-132.633	-7.111	40.295	1.00	33.57
21267	CB	TYR	D	391	-132.588	-5.786	41.050	1.00	32.67
21268	CG	TYR	D	391	-133.038	-5.874	42.493	1.00	33.02
21269	CD1	TYR	D	391	-132.119	-6.026	43.522	1.00	31.65
21270	CE1	TYR	D	391	-132.527	-6.097	44.841	1.00	32.39
21271	CZ	TYR	D	391	-133.875	-6.002	45.149	1.00	31.55
21272	OH	TYR	D	391	-134.297	-6.080	46.457	1.00	29.40
21273	CE2	TYR	D	391	-134.806	-5.850	44.144	1.00	31.36
21274	CD2	TYR	D	391	-134.389	-5.783	42.829	1.00	33.04
21275	C	TYR	D	391	-131.789	-8.142	41.027	1.00	33.49
21276	O	TYR	D	391	-132.321	-9.035	41.686	1.00	33.47
21277	N	ILE	D	392	-130.472	-8.009	40.879	1.00	33.22
21278	CA	ILE	D	392	-129.503	-8.860	41.554	1.00	33.32
21279	CB	ILE	D	392	-128.368	-9.250	40.586	1.00	33.70
21280	CG1	ILE	D	392	-128.870	-10.182	39.476	1.00	33.03
21281	CD1	ILE	D	392	-129.221	-11.532	39.945	1.00	33.23
21282	CG2	ILE	D	392	-127.203	-9.887	41.356	1.00	33.89
21283	C	ILE	D	392	-128.886	-8.067	42.698	1.00	33.31
21284	O	ILE	D	392	-128.479	-6.910	42.518	1.00	33.78
21285	N	SER	D	393	-128.806	-8.669	43.876	1.00	32.64
21286	CA	SER	D	393	-128.183	-7.981	45.004	1.00	32.76
21287	CB	SER	D	393	-129.201	-7.144	45.790	1.00	32.51
21288	OG	SER	D	393	-129.875	-7.933	46.759	1.00	33.92
21289	C	SER	D	393	-127.472	-8.960	45.915	1.00	32.29
21290	O	SER	D	393	-127.584	-10.171	45.738	1.00	31.99
21291	N	ASN	D	394	-126.719	-8.431	46.872	1.00	32.51
21292	CA	ASN	D	394	-126.000	-9.274	47.830	1.00	32.69
21293	CB	ASN	D	394	-124.527	-8.862	47.970	1.00	32.26
21294	CG	ASN	D	394	-124.338	-7.384	48.325	1.00	31.57
21295	OD1	ASN	D	394	-125.295	-6.636	48.589	1.00	31.30
21296	ND2	ASN	D	394	-123.085	-6.951	48.298	1.00	29.02
21297	C	ASN	D	394	-126.683	-9.279	49.189	1.00	33.36
21298	O	ASN	D	394	-126.095	-9.652	50.198	1.00	32.50
21299	N	GLU	D	395	-127.944	-8.867	49.199	1.00	34.75
21300	CA	GLU	D	395	-128.707	-8.829	50.436	1.00	36.34
21301	CB	GLU	D	395	-130.149	-8.415	50.169	1.00	36.30
21302	CG	GLU	D	395	-130.976	-8.423	51.443	1.00	36.61
21303	CD	GLU	D	395	-132.358	-7.840	51.268	1.00	37.91
21304	OE1	GLU	D	395	-132.893	-7.322	52.260	1.00	39.02
21305	OE2	GLU	D	395	-132.913	-7.897	50.148	1.00	39.24
21306	C	GLU	D	395	-128.726	-10.124	51.253	1.00	37.08
21307	O	GLU	D	395	-128.535	-10.103	52.471	1.00	37.83
21308	N	TYR	D	396	-128.954	-11.245	50.589	1.00	37.66

FIGURE 3 PB

A	B	C	D	E	F	G	H	I	J
21309	CA	TYR	D	396	-129.164	-12.497	51.302	1.00	38.42
21310	CB	TYR	D	396	-129.319	-13.671	50.332	1.00	39.08
21311	CG	TYR	D	396	-129.903	-14.891	50.993	1.00	40.75
21312	CD1	TYR	D	396	-129.281	-16.121	50.894	1.00	42.10
21313	CE1	TYR	D	396	-129.813	-17.229	51.500	1.00	43.64
21314	CZ	TYR	D	396	-130.974	-17.117	52.235	1.00	44.50
21315	OH	TYR	D	396	-131.491	-18.226	52.849	1.00	45.67
21316	CE2	TYR	D	396	-131.611	-15.909	52.359	1.00	43.32
21317	CD2	TYR	D	396	-131.070	-14.801	51.739	1.00	42.76
21318	C	TYR	D	396	-128.115	-12.822	52.335	1.00	38.41
21319	O	TYR	D	396	-126.949	-13.019	52.001	1.00	39.06
21320	N	LYS	D	397	-128.554	-12.879	53.594	1.00	38.17
21321	CA	LYS	D	397	-127.717	-13.254	54.735	1.00	37.76
21322	CB	LYS	D	397	-127.140	-14.660	54.554	1.00	38.02
21323	CG	LYS	D	397	-128.178	-15.777	54.569	1.00	39.40
21324	CD	LYS	D	397	-127.545	-17.152	54.746	1.00	41.15
21325	CE	LYS	D	397	-128.568	-18.272	54.523	1.00	44.14
21326	NZ	LYS	D	397	-127.948	-19.634	54.367	1.00	44.91
21327	C	LYS	D	397	-126.603	-12.263	55.024	1.00	37.22
21328	O	LYS	D	397	-125.683	-12.557	55.783	1.00	37.28
21329	N	GLY	D	398	-126.682	-11.087	54.417	1.00	36.41
21330	CA	GLY	D	398	-125.646	-10.092	54.606	1.00	35.51
21331	C	GLY	D	398	-124.273	-10.549	54.137	1.00	34.64
21332	O	GLY	D	398	-123.281	-10.208	54.746	1.00	34.99
21333	N	MET	D	399	-124.225	-11.309	53.050	1.00	34.17
21334	CA	MET	D	399	-122.972	-11.811	52.483	1.00	33.91
21335	CB	MET	D	399	-123.074	-13.312	52.149	1.00	34.02
21336	CG	MET	D	399	-123.071	-14.227	53.385	1.00	36.12
21337	SD	MET	D	399	-123.734	-15.905	53.097	1.00	40.58
21338	CE	MET	D	399	-122.457	-16.617	52.072	1.00	37.49
21339	C	MET	D	399	-122.693	-11.029	51.223	1.00	33.24
21340	O	MET	D	399	-123.348	-11.219	50.197	1.00	33.54
21341	N	PRO	D	400	-121.733	-10.127	51.296	1.00	32.85
21342	CA	PRO	D	400	-121.428	-9.258	50.157	1.00	31.96
21343	CB	PRO	D	400	-120.303	-8.368	50.689	1.00	32.56
21344	CG	PRO	D	400	-120.388	-8.488	52.219	1.00	32.56
21345	CD	PRO	D	400	-120.877	-9.856	52.469	1.00	32.49
21346	C	PRO	D	400	-120.966	-10.075	48.959	1.00	31.41
21347	O	PRO	D	400	-121.032	-9.603	47.806	1.00	31.06
21348	N	GLY	D	401	-120.535	-11.304	49.232	1.00	30.39
21349	CA	GLY	D	401	-120.019	-12.185	48.206	1.00	29.98
21350	C	GLY	D	401	-121.033	-13.138	47.618	1.00	29.92
21351	O	GLY	D	401	-120.681	-14.059	46.869	1.00	29.59
21352	N	GLY	D	402	-122.296	-12.925	47.965	1.00	30.03
21353	CA	GLY	D	402	-123.380	-13.709	47.412	1.00	30.76
21354	C	GLY	D	402	-124.202	-12.877	46.444	1.00	31.24
21355	O	GLY	D	402	-124.129	-11.646	46.459	1.00	31.82
21356	N	ARG	D	403	-124.983	-13.540	45.601	1.00	31.17
21357	CA	ARG	D	403	-125.805	-12.856	44.605	1.00	31.79
21358	CB	ARG	D	403	-125.148	-12.876	43.215	1.00	31.66
21359	CG	ARG	D	403	-123.788	-12.221	43.092	1.00	33.33

FIGURE 3 PC

A	B	C	D	E	F	G	H	I	J
21360	CD	ARG	D	403	-123.842	-10.718	43.121	1.00	34.68
21361	NE	ARG	D	403	-122.545	-10.099	42.887	1.00	36.17
21362	CZ	ARG	D	403	-121.648	-9.857	43.845	1.00	37.00
21363	NH1	ARG	D	403	-120.497	-9.260	43.545	1.00	35.90
21364	NH2	ARG	D	403	-121.900	-10.215	45.103	1.00	35.24
21365	C	ARG	D	403	-127.128	-13.579	44.459	1.00	31.84
21366	O	ARG	D	403	-127.160	-14.784	44.254	1.00	31.02
21367	N	ASN	D	404	-128.222	-12.831	44.529	1.00	32.69
21368	CA	ASN	D	404	-129.536	-13.416	44.293	1.00	33.04
21369	CB	ASN	D	404	-130.216	-13.788	45.605	1.00	32.99
21370	CG	ASN	D	404	-129.598	-14.992	46.222	1.00	34.62
21371	OD1	ASN	D	404	-128.764	-14.886	47.133	1.00	38.55
21372	ND2	ASN	D	404	-129.935	-16.148	45.692	1.00	34.43
21373	C	ASN	D	404	-130.398	-12.492	43.494	1.00	33.01
21374	O	ASN	D	404	-130.138	-11.290	43.448	1.00	33.01
21375	N	LEU	D	405	-131.420	-13.069	42.863	1.00	32.93
21376	CA	LEU	D	405	-132.376	-12.328	42.045	1.00	32.18
21377	CB	LEU	D	405	-132.739	-13.130	40.792	1.00	32.03
21378	CG	LEU	D	405	-133.891	-12.620	39.926	1.00	31.61
21379	CD1	LEU	D	405	-133.548	-11.250	39.356	1.00	29.59
21380	CD2	LEU	D	405	-134.244	-13.622	38.801	1.00	30.33
21381	C	LEU	D	405	-133.635	-12.052	42.857	1.00	32.74
21382	O	LEU	D	405	-134.217	-12.949	43.495	1.00	31.85
21383	N	TYR	D	406	-134.040	-10.794	42.836	1.00	32.97
21384	CA	TYR	D	406	-135.212	-10.364	43.546	1.00	33.88
21385	CB	TYR	D	406	-134.825	-9.373	44.648	1.00	33.78
21386	CG	TYR	D	406	-133.946	-9.942	45.738	1.00	32.63
21387	CD1	TYR	D	406	-134.439	-10.130	47.023	1.00	32.00
21388	CE1	TYR	D	406	-133.630	-10.635	48.044	1.00	31.50
21389	CZ	TYR	D	406	-132.316	-10.963	47.770	1.00	30.89
21390	OH	TYR	D	406	-131.510	-11.476	48.773	1.00	32.49
21391	CE2	TYR	D	406	-131.804	-10.779	46.501	1.00	30.49
21392	CD2	TYR	D	406	-132.614	-10.266	45.493	1.00	31.07
21393	C	TYR	D	406	-136.124	-9.678	42.553	1.00	34.67
21394	O	TYR	D	406	-135.686	-9.284	41.481	1.00	35.49
21395	N	LYS	D	407	-137.395	-9.547	42.903	1.00	35.65
21396	CA	LYS	D	407	-138.341	-8.803	42.074	1.00	36.67
21397	CB	LYS	D	407	-139.286	-9.734	41.295	1.00	36.90
21398	CG	LYS	D	407	-140.233	-10.547	42.178	1.00	38.89
21399	CD	LYS	D	407	-140.922	-11.691	41.423	1.00	40.76
21400	CE	LYS	D	407	-142.154	-11.240	40.640	1.00	44.41
21401	NZ	LYS	D	407	-143.256	-12.282	40.629	1.00	43.08
21402	C	LYS	D	407	-139.127	-7.853	42.971	1.00	36.78
21403	O	LYS	D	407	-139.624	-8.234	44.042	1.00	36.66
21404	N	ILE	D	408	-139.195	-6.600	42.547	1.00	37.10
21405	CA	ILE	D	408	-139.922	-5.596	43.293	1.00	37.04
21406	CB	ILE	D	408	-139.204	-4.256	43.236	1.00	36.23
21407	CG1	ILE	D	408	-137.831	-4.326	43.878	1.00	36.01
21408	CD1	ILE	D	408	-137.158	-2.960	43.957	1.00	33.49
21409	CG2	ILE	D	408	-140.016	-3.229	43.938	1.00	36.26
21410	C	ILE	D	408	-141.289	-5.394	42.684	1.00	37.65



FIGURE 3 PD

A	B	C	D	E	F	G	H	I	J
21411	O	ILE	D	408	-141.401	-5.034	41.515	1.00	37.20
21412	N	GLN	D	409	-142.330	-5.598	43.485	1.00	38.31
21413	CA	GLN	D	409	-143.691	-5.350	43.029	1.00	38.57
21414	CB	GLN	D	409	-144.674	-5.848	44.083	1.00	38.78
21415	CG	GLN	D	409	-146.009	-6.289	43.538	1.00	40.54
21416	CD	GLN	D	409	-147.113	-6.202	44.568	1.00	42.55
21417	OE1	GLN	D	409	-147.261	-7.089	45.414	1.00	44.19
21418	NE2	GLN	D	409	-147.893	-5.131	44.504	1.00	43.30
21419	C	GLN	D	409	-143.829	-3.842	42.820	1.00	38.57
21420	O	GLN	D	409	-143.724	-3.063	43.765	1.00	38.39
21421	N	LEU	D	410	-144.045	-3.418	41.581	1.00	38.83
21422	CA	LEU	D	410	-144.096	-1.990	41.286	1.00	39.17
21423	CB	LEU	D	410	-144.019	-1.742	39.778	1.00	39.59
21424	CG	LEU	D	410	-142.621	-1.439	39.217	1.00	40.31
21425	CD1	LEU	D	410	-141.515	-1.972	40.122	1.00	38.99
21426	CD2	LEU	D	410	-142.484	-1.970	37.789	1.00	40.56
21427	C	LEU	D	410	-145.308	-1.285	41.883	1.00	39.46
21428	O	LEU	D	410	-145.281	-0.070	42.101	1.00	39.25
21429	N	SER	D	411	-146.374	-2.039	42.144	1.00	39.59
21430	CA	SER	D	411	-147.547	-1.454	42.777	1.00	39.90
21431	CB	SER	D	411	-148.790	-2.339	42.590	1.00	40.21
21432	OG	SER	D	411	-148.800	-3.468	43.458	1.00	40.00
21433	C	SER	D	411	-147.274	-1.167	44.252	1.00	40.10
21434	O	SER	D	411	-147.932	-0.325	44.839	1.00	40.37
21435	N	ASP	D	412	-146.292	-1.858	44.839	1.00	40.45
21436	CA	ASP	D	412	-145.877	-1.625	46.239	1.00	40.64
21437	CB	ASP	D	412	-146.788	-2.349	47.233	1.00	40.63
21438	CG	ASP	D	412	-146.538	-1.916	48.686	1.00	41.97
21439	OD1	ASP	D	412	-147.314	-2.347	49.573	1.00	40.00
21440	OD2	ASP	D	412	-145.599	-1.142	49.029	1.00	41.57
21441	C	ASP	D	412	-144.443	-2.098	46.413	1.00	40.30
21442	O	ASP	D	412	-144.197	-3.287	46.546	1.00	40.84
21443	N	TYR	D	413	-143.489	-1.172	46.419	1.00	40.08
21444	CA	TYR	D	413	-142.079	-1.567	46.427	1.00	39.51
21445	CB	TYR	D	413	-141.158	-0.426	45.969	1.00	39.27
21446	CG	TYR	D	413	-141.130	0.781	46.862	1.00	37.33
21447	CD1	TYR	D	413	-140.282	0.833	47.949	1.00	35.88
21448	CE1	TYR	D	413	-140.229	1.934	48.757	1.00	34.67
21449	CZ	TYR	D	413	-141.029	3.004	48.492	1.00	36.06
21450	OH	TYR	D	413	-140.968	4.095	49.318	1.00	35.92
21451	CE2	TYR	D	413	-141.892	2.988	47.412	1.00	36.35
21452	CD2	TYR	D	413	-141.931	1.883	46.602	1.00	36.60
21453	C	TYR	D	413	-141.575	-2.211	47.709	1.00	39.83
21454	O	TYR	D	413	-140.532	-2.869	47.699	1.00	39.86
21455	N	THR	D	414	-142.317	-2.056	48.803	1.00	39.71
21456	CA	THR	D	414	-141.943	-2.718	50.046	1.00	39.23
21457	CB	THR	D	414	-142.774	-2.186	51.223	1.00	39.42
21458	OG1	THR	D	414	-144.175	-2.462	51.014	1.00	38.38
21459	CG2	THR	D	414	-142.691	-0.664	51.277	1.00	38.32
21460	C	THR	D	414	-142.164	-4.211	49.868	1.00	39.68
21461	O	THR	D	414	-141.595	-5.033	50.584	1.00	40.05

FIGURE 3 PE

A	B	C	D	E	F	G	H	I	J
21462	N	LYS	D	415	-142.979	-4.567	48.886	1.00	39.61
21463	CA	LYS	D	415	-143.232	-5.969	48.623	1.00	40.20
21464	CB	LYS	D	415	-144.658	-6.174	48.103	1.00	40.65
21465	CG	LYS	D	415	-145.753	-5.943	49.167	1.00	42.91
21466	CD	LYS	D	415	-147.143	-6.165	48.571	1.00	48.34
21467	CE	LYS	D	415	-148.267	-5.526	49.405	1.00	51.00
21468	NZ	LYS	D	415	-149.436	-5.087	48.543	1.00	52.41
21469	C	LYS	D	415	-142.173	-6.514	47.657	1.00	39.99
21470	O	LYS	D	415	-142.234	-6.288	46.453	1.00	39.69
21471	N	VAL	D	416	-141.206	-7.239	48.206	1.00	39.55
21472	CA	VAL	D	416	-140.078	-7.713	47.432	1.00	39.65
21473	CB	VAL	D	416	-138.763	-7.049	47.913	1.00	39.43
21474	CG1	VAL	D	416	-137.575	-7.558	47.097	1.00	38.91
21475	CG2	VAL	D	416	-138.866	-5.545	47.842	1.00	38.33
21476	C	VAL	D	416	-139.905	-9.201	47.605	1.00	40.16
21477	O	VAL	D	416	-139.900	-9.697	48.730	1.00	40.54
21478	N	THR	D	417	-139.730	-9.917	46.502	1.00	40.19
21479	CA	THR	D	417	-139.552	-11.352	46.594	1.00	40.73
21480	CB	THR	D	417	-140.654	-12.083	45.815	1.00	40.89
21481	OG1	THR	D	417	-141.943	-11.584	46.207	1.00	41.38
21482	CG2	THR	D	417	-140.671	-13.551	46.219	1.00	40.34
21483	C	THR	D	417	-138.212	-11.819	46.064	1.00	41.14
21484	O	THR	D	417	-137.792	-11.447	44.972	1.00	40.93
21485	N	CYS	D	418	-137.548	-12.667	46.824	1.00	42.11
21486	CA	CYS	D	418	-136.319	-13.233	46.333	1.00	43.37
21487	CB	CYS	D	418	-135.368	-13.576	47.462	1.00	43.62
21488	SG	CYS	D	418	-133.740	-13.959	46.802	1.00	44.90
21489	C	CYS	D	418	-136.656	-14.483	45.557	1.00	43.93
21490	O	CYS	D	418	-137.248	-15.411	46.101	1.00	44.60
21491	N	LEU	D	419	-136.277	-14.502	44.284	1.00	44.37
21492	CA	LEU	D	419	-136.554	-15.628	43.405	1.00	44.48
21493	CB	LEU	D	419	-136.660	-15.136	41.961	1.00	44.17
21494	CG	LEU	D	419	-137.709	-14.031	41.779	1.00	44.46
21495	CD1	LEU	D	419	-137.792	-13.568	40.331	1.00	43.74
21496	CD2	LEU	D	419	-139.069	-14.517	42.271	1.00	42.94
21497	C	LEU	D	419	-135.520	-16.743	43.474	1.00	45.00
21498	O	LEU	D	419	-135.784	-17.866	43.037	1.00	45.47
21499	N	SER	D	420	-134.343	-16.458	44.013	1.00	45.42
21500	CA	SER	D	420	-133.297	-17.472	44.001	1.00	45.66
21501	CB	SER	D	420	-132.104	-17.002	43.159	1.00	45.76
21502	OG	SER	D	420	-131.376	-15.995	43.835	1.00	45.05
21503	C	SER	D	420	-132.817	-17.872	45.379	1.00	45.89
21504	O	SER	D	420	-132.446	-19.029	45.602	1.00	45.56
21505	N	CYS	D	421	-132.827	-16.922	46.304	1.00	46.29
21506	CA	CYS	D	421	-132.279	-17.182	47.629	1.00	47.17
21507	CB	CYS	D	421	-132.876	-16.234	48.664	1.00	47.16
21508	SG	CYS	D	421	-132.521	-14.509	48.309	1.00	47.80
21509	C	CYS	D	421	-132.507	-18.599	48.090	1.00	47.61
21510	O	CYS	D	421	-131.597	-19.270	48.577	1.00	47.82
21511	N	GLU	D	422	-133.728	-19.071	47.916	1.00	48.19
21512	CA	GLU	D	422	-134.098	-20.349	48.500	1.00	48.46

FIGURE 3 PF

A	B	C	D	E	F	G	H	I	J
21513	CB	GLU	D	422	-135.454	-20.191	49.179	1.00	48.73
21514	CG	GLU	D	422	-135.466	-20.669	50.606	1.00	50.61
21515	CD	GLU	D	422	-134.709	-19.725	51.495	1.00	52.80
21516	OE1	GLU	D	422	-133.838	-20.187	52.279	1.00	53.41
21517	OE2	GLU	D	422	-134.994	-18.515	51.391	1.00	53.84
21518	C	GLU	D	422	-134.134	-21.547	47.560	1.00	47.86
21519	O	GLU	D	422	-134.444	-22.642	47.997	1.00	47.92
21520	N	LEU	D	423	-133.826	-21.359	46.283	1.00	47.66
21521	CA	LEU	D	423	-133.895	-22.482	45.340	1.00	47.50
21522	CB	LEU	D	423	-133.505	-22.062	43.928	1.00	46.72
21523	CG	LEU	D	423	-134.432	-21.064	43.237	1.00	46.71
21524	CD1	LEU	D	423	-133.861	-20.714	41.865	1.00	45.47
21525	CD2	LEU	D	423	-135.879	-21.585	43.131	1.00	44.66
21526	C	LEU	D	423	-133.075	-23.702	45.742	1.00	47.55
21527	O	LEU	D	423	-133.505	-24.831	45.525	1.00	48.17
21528	N	ASN	D	424	-131.904	-23.468	46.318	1.00	47.60
21529	CA	ASN	D	424	-130.973	-24.525	46.690	1.00	47.92
21530	CB	ASN	D	424	-130.413	-25.192	45.437	1.00	47.81
21531	CG	ASN	D	424	-129.955	-26.611	45.692	1.00	49.37
21532	OD1	ASN	D	424	-129.435	-26.929	46.764	1.00	49.33
21533	ND2	ASN	D	424	-130.155	-27.481	44.704	1.00	51.05
21534	C	ASN	D	424	-129.836	-23.901	47.503	1.00	47.90
21535	O	ASN	D	424	-128.681	-23.873	47.083	1.00	47.55
21536	N	PRO	D	425	-130.191	-23.443	48.694	1.00	47.98
21537	CA	PRO	D	425	-129.311	-22.654	49.567	1.00	48.03
21538	CB	PRO	D	425	-130.123	-22.569	50.868	1.00	48.10
21539	CG	PRO	D	425	-131.064	-23.736	50.765	1.00	48.04
21540	CD	PRO	D	425	-131.498	-23.696	49.323	1.00	47.95
21541	C	PRO	D	425	-127.924	-23.227	49.870	1.00	48.20
21542	O	PRO	D	425	-127.037	-22.452	50.238	1.00	48.51
21543	N	GLU	D	426	-127.737	-24.537	49.754	1.00	47.89
21544	CA	GLU	D	426	-126.446	-25.129	50.076	1.00	47.79
21545	CB	GLU	D	426	-126.594	-26.585	50.536	1.00	48.56
21546	CG	GLU	D	426	-127.339	-26.801	51.843	1.00	50.73
21547	CD	GLU	D	426	-127.464	-28.279	52.171	1.00	54.79
21548	OE1	GLU	D	426	-126.586	-28.803	52.894	1.00	56.18
21549	OE2	GLU	D	426	-128.432	-28.924	51.692	1.00	56.61
21550	C	GLU	D	426	-125.526	-25.102	48.877	1.00	46.74
21551	O	GLU	D	426	-124.343	-24.816	49.004	1.00	46.76
21552	N	ARG	D	427	-126.065	-25.427	47.707	1.00	45.40
21553	CA	ARG	D	427	-125.240	-25.467	46.519	1.00	44.20
21554	CB	ARG	D	427	-125.727	-26.551	45.546	1.00	44.04
21555	CG	ARG	D	427	-125.723	-26.080	44.107	1.00	44.50
21556	CD	ARG	D	427	-125.038	-26.983	43.086	1.00	43.76
21557	NE	ARG	D	427	-125.908	-28.054	42.638	1.00	42.34
21558	CZ	ARG	D	427	-125.861	-28.639	41.452	1.00	42.26
21559	NH1	ARG	D	427	-126.715	-29.615	41.190	1.00	45.11
21560	NH2	ARG	D	427	-124.995	-28.263	40.521	1.00	40.08
21561	C	ARG	D	427	-125.173	-24.128	45.798	1.00	43.49
21562	O	ARG	D	427	-124.241	-23.877	45.031	1.00	43.01
21563	N	CYS	D	428	-126.138	-23.259	46.078	1.00	42.43

FIGURE 3 PG

A	B	C	D	E	F	G	H	I	J
21564	CA	CYS	D	428	-126.316	-22.075	45.261	1.00	41.60
21565	CB	CYS	D	428	-127.509	-22.311	44.340	1.00	41.72
21566	SG	CYS	D	428	-127.122	-23.466	43.014	1.00	42.76
21567	C	CYS	D	428	-126.529	-20.771	45.990	1.00	40.66
21568	O	CYS	D	428	-127.604	-20.527	46.522	1.00	40.59
21569	N	GLN	D	429	-125.523	-19.903	45.984	1.00	39.42
21570	CA	GLN	D	429	-125.729	-18.605	46.588	1.00	38.59
21571	CB	GLN	D	429	-125.367	-18.610	48.088	1.00	38.58
21572	CG	GLN	D	429	-123.947	-18.912	48.379	1.00	40.51
21573	CD	GLN	D	429	-123.720	-19.460	49.771	1.00	43.04
21574	OE1	GLN	D	429	-124.587	-20.127	50.344	1.00	44.99
21575	NE2	GLN	D	429	-122.540	-19.206	50.309	1.00	42.87
21576	C	GLN	D	429	-125.122	-17.462	45.759	1.00	37.72
21577	O	GLN	D	429	-125.005	-16.334	46.225	1.00	37.52
21578	N	TYR	D	430	-124.799	-17.759	44.501	1.00	36.84
21579	CA	TYR	D	430	-124.289	-16.762	43.564	1.00	36.29
21580	CB	TYR	D	430	-122.778	-16.910	43.408	1.00	36.15
21581	CG	TYR	D	430	-122.035	-15.707	42.852	1.00	35.36
21582	CD1	TYR	D	430	-122.065	-15.387	41.501	1.00	34.99
21583	CE1	TYR	D	430	-121.359	-14.288	41.012	1.00	34.16
21584	CZ	TYR	D	430	-120.606	-13.530	41.890	1.00	34.72
21585	OH	TYR	D	430	-119.880	-12.448	41.470	1.00	34.97
21586	CE2	TYR	D	430	-120.556	-13.848	43.215	1.00	34.00
21587	CD2	TYR	D	430	-121.264	-14.918	43.686	1.00	35.44
21588	C	TYR	D	430	-124.948	-16.973	42.207	1.00	36.15
21589	O	TYR	D	430	-124.584	-17.900	41.484	1.00	36.07
21590	N	TYR	D	431	-125.888	-16.102	41.848	1.00	35.64
21591	CA	TYR	D	431	-126.613	-16.241	40.589	1.00	35.47
21592	CB	TYR	D	431	-128.108	-16.294	40.856	1.00	35.49
21593	CG	TYR	D	431	-128.639	-17.525	41.507	1.00	36.37
21594	CD1	TYR	D	431	-129.229	-18.524	40.751	1.00	37.01
21595	CE1	TYR	D	431	-129.747	-19.658	41.347	1.00	36.29
21596	CZ	TYR	D	431	-129.695	-19.780	42.702	1.00	35.52
21597	OH	TYR	D	431	-130.217	-20.892	43.297	1.00	36.69
21598	CE2	TYR	D	431	-129.115	-18.794	43.482	1.00	36.76
21599	CD2	TYR	D	431	-128.603	-17.674	42.886	1.00	36.41
21600	C	TYR	D	431	-126.505	-15.076	39.635	1.00	35.33
21601	O	TYR	D	431	-126.292	-13.936	40.032	1.00	35.64
21602	N	SER	D	432	-126.710	-15.381	38.368	1.00	35.27
21603	CA	SER	D	432	-126.946	-14.371	37.354	1.00	35.96
21604	CB	SER	D	432	-125.799	-14.267	36.358	1.00	35.30
21605	OG	SER	D	432	-125.588	-15.515	35.744	1.00	35.72
21606	C	SER	D	432	-128.229	-14.841	36.655	1.00	36.30
21607	O	SER	D	432	-128.697	-15.970	36.871	1.00	36.14
21608	N	VAL	D	433	-128.791	-13.985	35.821	1.00	36.82
21609	CA	VAL	D	433	-130.037	-14.311	35.163	1.00	37.56
21610	CB	VAL	D	433	-131.196	-13.678	35.930	1.00	37.90
21611	CG1	VAL	D	433	-131.030	-12.169	35.935	1.00	36.95
21612	CG2	VAL	D	433	-132.543	-14.108	35.341	1.00	38.37
21613	C	VAL	D	433	-130.087	-13.836	33.706	1.00	38.13
21614	O	VAL	D	433	-129.519	-12.800	33.344	1.00	37.79

FIGURE 3 PH

A	B	C	D	E	F	G	H	I	J
21615	N	SER	D	434	-130.744	-14.629	32.870	1.00	38.99
21616	CA	SER	D	434	-130.968	-14.265	31.479	1.00	40.18
21617	CB	SER	D	434	-130.234	-15.215	30.536	1.00	40.13
21618	OG	SER	D	434	-130.388	-14.789	29.191	1.00	41.55
21619	C	SER	D	434	-132.477	-14.283	31.216	1.00	40.75
21620	O	SER	D	434	-133.128	-15.330	31.301	1.00	40.69
21621	N	PHE	D	435	-133.034	-13.115	30.924	1.00	41.85
21622	CA	PHE	D	435	-134.469	-12.993	30.702	1.00	43.32
21623	CB	PHE	D	435	-134.993	-11.682	31.292	1.00	43.21
21624	CG	PHE	D	435	-135.297	-11.755	32.753	1.00	43.92
21625	CD1	PHE	D	435	-134.322	-11.471	33.690	1.00	44.21
21626	CE1	PHE	D	435	-134.599	-11.536	35.036	1.00	44.76
21627	CZ	PHE	D	435	-135.863	-11.887	35.466	1.00	45.46
21628	CE2	PHE	D	435	-136.843	-12.176	34.543	1.00	45.16
21629	CD2	PHE	D	435	-136.556	-12.111	33.191	1.00	44.63
21630	C	PHE	D	435	-134.872	-13.051	29.237	1.00	44.20
21631	O	PHE	D	435	-134.188	-12.488	28.370	1.00	44.32
21632	N	SER	D	436	-135.992	-13.721	28.971	1.00	45.14
21633	CA	SER	D	436	-136.565	-13.726	27.629	1.00	46.32
21634	CB	SER	D	436	-137.775	-14.657	27.536	1.00	46.16
21635	OG	SER	D	436	-138.793	-14.300	28.455	1.00	45.63
21636	C	SER	D	436	-136.939	-12.285	27.313	1.00	47.45
21637	O	SER	D	436	-137.091	-11.474	28.234	1.00	47.31
21638	N	LYS	D	437	-137.110	-11.976	26.027	1.00	48.89
21639	CA	LYS	D	437	-137.283	-10.595	25.575	1.00	50.52
21640	CB	LYS	D	437	-137.419	-10.494	24.042	1.00	50.79
21641	CG	LYS	D	437	-138.798	-10.738	23.462	1.00	52.70
21642	CD	LYS	D	437	-138.760	-10.584	21.936	1.00	55.69
21643	CE	LYS	D	437	-140.158	-10.610	21.304	1.00	56.82
21644	NZ	LYS	D	437	-140.888	-11.882	21.586	1.00	58.40
21645	C	LYS	D	437	-138.298	-9.724	26.319	1.00	51.23
21646	O	LYS	D	437	-138.068	-8.526	26.491	1.00	51.25
21647	N	GLU	D	438	-139.412	-10.294	26.759	1.00	52.30
21648	CA	GLU	D	438	-140.339	-9.499	27.565	1.00	53.37
21649	CB	GLU	D	438	-141.729	-9.380	26.932	1.00	53.96
21650	CG	GLU	D	438	-142.041	-7.988	26.383	1.00	57.23
21651	CD	GLU	D	438	-141.751	-7.856	24.898	1.00	61.31
21652	OE1	GLU	D	438	-140.599	-8.124	24.485	1.00	63.06
21653	OE2	GLU	D	438	-142.683	-7.495	24.141	1.00	62.55
21654	C	GLU	D	438	-140.408	-10.017	28.995	1.00	53.07
21655	O	GLU	D	438	-141.348	-9.726	29.736	1.00	53.48
21656	N	ALA	D	439	-139.399	-10.795	29.367	1.00	52.51
21657	CA	ALA	D	439	-139.267	-11.291	30.732	1.00	51.94
21658	CB	ALA	D	439	-139.268	-10.130	31.722	1.00	52.12
21659	C	ALA	D	439	-140.318	-12.318	31.117	1.00	51.46
21660	O	ALA	D	439	-140.627	-12.481	32.297	1.00	51.35
21661	N	LYS	D	440	-140.858	-13.004	30.116	1.00	50.81
21662	CA	LYS	D	440	-141.808	-14.087	30.333	1.00	50.15
21663	CB	LYS	D	440	-142.288	-14.646	28.991	1.00	50.59
21664	CG	LYS	D	440	-143.716	-14.293	28.585	1.00	52.48
21665	CD	LYS	D	440	-144.161	-15.176	27.408	1.00	54.74

FIGURE 3 PI

A	B	C	D	E	F	G	H	I	J
21666	CE	LYS	D	440	-145.640	-15.003	27.069	1.00	56.58
21667	NZ	LYS	D	440	-145.904	-13.744	26.309	1.00	56.63
21668	C	LYS	D	440	-141.121	-15.205	31.085	1.00	49.03
21669	O	LYS	D	440	-141.705	-15.838	31.947	1.00	48.80
21670	N	TYR	D	441	-139.873	-15.460	30.733	1.00	48.21
21671	CA	TYR	D	441	-139.120	-16.517	31.374	1.00	47.74
21672	CB	TYR	D	441	-138.895	-17.673	30.406	1.00	47.94
21673	CG	TYR	D	441	-140.137	-18.159	29.711	1.00	50.35
21674	CD1	TYR	D	441	-140.543	-17.597	28.510	1.00	51.56
21675	CE1	TYR	D	441	-141.671	-18.038	27.865	1.00	53.50
21676	CZ	TYR	D	441	-142.412	-19.062	28.409	1.00	53.86
21677	OH	TYR	D	441	-143.537	-19.496	27.753	1.00	54.95
21678	CE2	TYR	D	441	-142.035	-19.642	29.603	1.00	53.67
21679	CD2	TYR	D	441	-140.897	-19.190	30.247	1.00	51.95
21680	C	TYR	D	441	-137.762	-16.009	31.776	1.00	46.81
21681	O	TYR	D	441	-137.343	-14.930	31.354	1.00	46.48
21682	N	TYR	D	442	-137.062	-16.810	32.574	1.00	45.97
21683	CA	TYR	D	442	-135.684	-16.495	32.914	1.00	44.89
21684	CB	TYR	D	442	-135.590	-15.490	34.064	1.00	44.45
21685	CG	TYR	D	442	-136.242	-15.889	35.363	1.00	43.39
21686	CD1	TYR	D	442	-137.520	-15.445	35.680	1.00	41.55
21687	CE1	TYR	D	442	-138.116	-15.778	36.871	1.00	39.53
21688	CZ	TYR	D	442	-137.433	-16.544	37.783	1.00	39.57
21689	OH	TYR	D	442	-138.045	-16.872	38.963	1.00	40.52
21690	CE2	TYR	D	442	-136.159	-16.992	37.516	1.00	40.25
21691	CD2	TYR	D	442	-135.560	-16.655	36.308	1.00	42.45
21692	C	TYR	D	442	-134.801	-17.712	33.162	1.00	44.37
21693	O	TYR	D	442	-135.222	-18.700	33.765	1.00	44.44
21694	N	GLN	D	443	-133.581	-17.648	32.649	1.00	43.41
21695	CA	GLN	D	443	-132.625	-18.688	32.944	1.00	42.92
21696	CB	GLN	D	443	-131.656	-18.931	31.785	1.00	42.69
21697	CG	GLN	D	443	-130.544	-19.908	32.162	1.00	42.04
21698	CD	GLN	D	443	-129.411	-19.954	31.152	1.00	42.81
21699	OE1	GLN	D	443	-128.810	-21.009	30.948	1.00	43.87
21700	NE2	GLN	D	443	-129.120	-18.825	30.519	1.00	41.23
21701	C	GLN	D	443	-131.858	-18.224	34.174	1.00	42.66
21702	O	GLN	D	443	-131.360	-17.099	34.223	1.00	42.28
21703	N	LEU	D	444	-131.783	-19.088	35.172	1.00	42.18
21704	CA	LEU	D	444	-131.056	-18.772	36.371	1.00	41.84
21705	CB	LEU	D	444	-131.813	-19.301	37.580	1.00	41.66
21706	CG	LEU	D	444	-132.168	-18.325	38.705	1.00	41.03
21707	CD1	LEU	D	444	-132.217	-16.883	38.224	1.00	38.47
21708	CD2	LEU	D	444	-133.492	-18.738	39.336	1.00	38.99
21709	C	LEU	D	444	-129.730	-19.488	36.225	1.00	42.26
21710	O	LEU	D	444	-129.691	-20.644	35.759	1.00	42.21
21711	N	ARG	D	445	-128.647	-18.800	36.586	1.00	42.14
21712	CA	ARG	D	445	-127.309	-19.385	36.527	1.00	42.28
21713	CB	ARG	D	445	-126.464	-18.679	35.471	1.00	42.67
21714	CG	ARG	D	445	-124.990	-19.098	35.433	1.00	44.72
21715	CD	ARG	D	445	-124.049	-17.909	35.576	1.00	48.07
21716	NE	ARG	D	445	-122.828	-17.971	34.777	1.00	48.95

FIGURE 3 PJ

A	B	C	D	E	F	G	H	I	J
21717	CZ	ARG	D	445	-122.216	-16.885	34.304	1.00	50.04
21718	NH1	ARG	D	445	-121.096	-16.994	33.596	1.00	51.55
21719	NH2	ARG	D	445	-122.720	-15.680	34.554	1.00	47.93
21720	C	ARG	D	445	-126.636	-19.293	37.903	1.00	42.16
21721	O	ARG	D	445	-126.298	-18.204	38.374	1.00	41.53
21722	N	CYS	D	446	-126.456	-20.450	38.534	1.00	41.65
21723	CA	CYS	D	446	-125.851	-20.554	39.848	1.00	41.54
21724	CB	CYS	D	446	-126.619	-21.589	40.651	1.00	41.64
21725	SG	CYS	D	446	-125.705	-22.405	41.978	1.00	46.47
21726	C	CYS	D	446	-124.361	-20.924	39.741	1.00	40.75
21727	O	CYS	D	446	-123.999	-21.988	39.211	1.00	40.72
21728	N	SER	D	447	-123.497	-20.052	40.252	1.00	39.17
21729	CA	SER	D	447	-122.068	-20.271	40.124	1.00	38.14
21730	CB	SER	D	447	-121.359	-18.974	39.706	1.00	38.31
21731	OG	SER	D	447	-121.675	-18.644	38.361	1.00	38.49
21732	C	SER	D	447	-121.380	-20.888	41.346	1.00	37.06
21733	O	SER	D	447	-120.213	-21.269	41.267	1.00	36.73
21734	N	GLY	D	448	-122.087	-20.995	42.464	1.00	35.95
21735	CA	GLY	D	448	-121.483	-21.548	43.666	1.00	34.88
21736	C	GLY	D	448	-122.336	-21.332	44.886	1.00	34.41
21737	O	GLY	D	448	-123.344	-20.628	44.820	1.00	34.38
21738	N	PRO	D	449	-121.900	-21.843	46.032	1.00	34.18
21739	CA	PRO	D	449	-120.606	-22.503	46.199	1.00	34.35
21740	CB	PRO	D	449	-120.456	-22.511	47.714	1.00	34.42
21741	CG	PRO	D	449	-121.830	-22.751	48.151	1.00	34.59
21742	CD	PRO	D	449	-122.637	-21.785	47.301	1.00	33.81
21743	C	PRO	D	449	-120.477	-23.949	45.701	1.00	34.75
21744	O	PRO	D	449	-119.353	-24.445	45.712	1.00	34.04
21745	N	GLY	D	450	-121.570	-24.618	45.329	1.00	34.83
21746	CA	GLY	D	450	-121.467	-25.974	44.826	1.00	35.54
21747	C	GLY	D	450	-121.216	-25.904	43.328	1.00	36.40
21748	O	GLY	D	450	-120.901	-24.833	42.820	1.00	36.56
21749	N	LEU	D	451	-121.375	-27.019	42.619	1.00	37.17
21750	CA	LEU	D	451	-121.167	-27.035	41.171	1.00	38.36
21751	CB	LEU	D	451	-121.264	-28.450	40.599	1.00	38.29
21752	CG	LEU	D	451	-120.316	-29.497	41.169	1.00	39.47
21753	CD1	LEU	D	451	-118.947	-28.897	41.404	1.00	42.20
21754	CD2	LEU	D	451	-120.222	-30.691	40.226	1.00	39.59
21755	C	LEU	D	451	-122.192	-26.164	40.489	1.00	38.94
21756	O	LEU	D	451	-123.328	-26.094	40.929	1.00	38.53
21757	N	PRO	D	452	-121.793	-25.512	39.405	1.00	39.85
21758	CA	PRO	D	452	-122.686	-24.601	38.692	1.00	40.73
21759	CB	PRO	D	452	-121.879	-24.214	37.443	1.00	40.68
21760	CG	PRO	D	452	-120.463	-24.420	37.829	1.00	40.65
21761	CD	PRO	D	452	-120.460	-25.592	38.784	1.00	40.03
21762	C	PRO	D	452	-123.984	-25.284	38.294	1.00	41.76
21763	O	PRO	D	452	-123.955	-26.413	37.795	1.00	41.77
21764	N	LEU	D	453	-125.104	-24.589	38.489	1.00	42.72
21765	CA	LEU	D	453	-126.409	-25.132	38.142	1.00	44.01
21766	CB	LEU	D	453	-127.171	-25.472	39.421	1.00	43.65
21767	CG	LEU	D	453	-128.654	-25.818	39.330	1.00	44.43

FIGURE 3 PK

A	B	C	D	E	F	G	H	I	J
21768	CD1	LEU	D	453	-128.878	-27.054	38.482	1.00	45.71
21769	CD2	LEU	D	453	-129.205	-26.022	40.733	1.00	43.84
21770	C	LEU	D	453	-127.218	-24.183	37.243	1.00	44.57
21771	O	LEU	D	453	-127.478	-23.038	37.599	1.00	45.35
21772	N	TYR	D	454	-127.615	-24.658	36.072	1.00	45.35
21773	CA	TYR	D	454	-128.392	-23.839	35.144	1.00	45.92
21774	CB	TYR	D	454	-127.792	-23.924	33.745	1.00	45.73
21775	CG	TYR	D	454	-126.402	-23.350	33.654	1.00	45.75
21776	CD1	TYR	D	454	-126.179	-22.131	33.033	1.00	45.46
21777	CE1	TYR	D	454	-124.913	-21.598	32.943	1.00	45.32
21778	CZ	TYR	D	454	-123.845	-22.278	33.479	1.00	44.31
21779	OH	TYR	D	454	-122.596	-21.729	33.374	1.00	42.66
21780	CE2	TYR	D	454	-124.028	-23.497	34.100	1.00	44.72
21781	CD2	TYR	D	454	-125.306	-24.029	34.182	1.00	46.13
21782	C	TYR	D	454	-129.851	-24.285	35.112	1.00	46.43
21783	O	TYR	D	454	-130.134	-25.451	34.886	1.00	46.58
21784	N	THR	D	455	-130.774	-23.356	35.343	1.00	47.08
21785	CA	THR	D	455	-132.193	-23.690	35.367	1.00	47.64
21786	CB	THR	D	455	-132.713	-23.740	36.813	1.00	47.54
21787	OG1	THR	D	455	-132.289	-22.567	37.508	1.00	47.64
21788	CG2	THR	D	455	-132.039	-24.851	37.592	1.00	47.78
21789	C	THR	D	455	-133.045	-22.730	34.539	1.00	47.80
21790	O	THR	D	455	-132.574	-21.687	34.105	1.00	48.21
21791	N	LEU	D	456	-134.306	-23.097	34.332	1.00	48.04
21792	CA	LEU	D	456	-135.245	-22.295	33.550	1.00	48.05
21793	CB	LEU	D	456	-135.546	-22.994	32.223	1.00	48.01
21794	CG	LEU	D	456	-135.875	-22.155	30.989	1.00	47.55
21795	CD1	LEU	D	456	-137.272	-22.447	30.468	1.00	47.66
21796	CD2	LEU	D	456	-135.672	-20.683	31.245	1.00	46.82
21797	C	LEU	D	456	-136.526	-22.093	34.342	1.00	48.19
21798	O	LEU	D	456	-137.050	-23.031	34.929	1.00	47.89
21799	N	HIS	D	457	-137.034	-20.864	34.352	1.00	48.72
21800	CA	HIS	D	457	-138.213	-20.543	35.142	1.00	48.94
21801	CB	HIS	D	457	-137.789	-19.790	36.408	1.00	48.74
21802	CG	HIS	D	457	-136.662	-20.441	37.143	1.00	47.92
21803	ND1	HIS	D	457	-136.837	-21.096	38.344	1.00	47.19
21804	CE1	HIS	D	457	-135.677	-21.581	38.751	1.00	46.29
21805	NE2	HIS	D	457	-134.759	-21.274	37.852	1.00	47.36
21806	CD2	HIS	D	457	-135.348	-20.558	36.838	1.00	47.16
21807	C	HIS	D	457	-139.197	-19.682	34.381	1.00	49.53
21808	O	HIS	D	457	-138.798	-18.879	33.538	1.00	49.59
21809	N	SER	D	458	-140.487	-19.847	34.674	1.00	50.26
21810	CA	SER	D	458	-141.500	-18.966	34.102	1.00	50.88
21811	CB	SER	D	458	-142.767	-19.726	33.713	1.00	50.96
21812	OG	SER	D	458	-143.549	-20.052	34.849	1.00	51.17
21813	C	SER	D	458	-141.812	-17.902	35.145	1.00	51.50
21814	O	SER	D	458	-142.068	-18.221	36.306	1.00	50.79
21815	N	SER	D	459	-141.764	-16.640	34.730	1.00	52.70
21816	CA	SER	D	459	-141.974	-15.522	35.642	1.00	54.05
21817	CB	SER	D	459	-141.491	-14.211	35.016	1.00	54.13
21818	OG	SER	D	459	-141.658	-14.227	33.618	1.00	54.49



FIGURE 3 PL

A	B	C	D	E	F	G	H	I	J
21819	C	SER	D	459	-143.408	-15.385	36.140	1.00	54.93
21820	O	SER	D	459	-143.638	-14.942	37.261	1.00	55.05
21821	N	VAL	D	460	-144.364	-15.778	35.310	1.00	56.06
21822	CA	VAL	D	460	-145.769	-15.728	35.691	1.00	57.14
21823	CB	VAL	D	460	-146.599	-16.732	34.878	1.00	57.09
21824	CG1	VAL	D	460	-148.034	-16.753	35.373	1.00	57.72
21825	CG2	VAL	D	460	-146.546	-16.377	33.396	1.00	57.91
21826	C	VAL	D	460	-145.969	-16.006	37.181	1.00	57.62
21827	O	VAL	D	460	-146.490	-15.164	37.909	1.00	57.81
21828	N	ASN	D	461	-145.563	-17.192	37.624	1.00	58.27
21829	CA	ASN	D	461	-145.685	-17.576	39.021	1.00	58.95
21830	CB	ASN	D	461	-146.436	-18.902	39.147	1.00	59.48
21831	CG	ASN	D	461	-147.945	-18.738	39.068	1.00	60.70
21832	OD1	ASN	D	461	-148.521	-17.831	39.679	1.00	62.63
21833	ND2	ASN	D	461	-148.594	-19.627	38.326	1.00	61.00
21834	C	ASN	D	461	-144.319	-17.718	39.688	1.00	59.24
21835	O	ASN	D	461	-144.211	-17.653	40.914	1.00	59.41
21836	N	ASP	D	462	-143.288	-17.931	38.873	1.00	59.20
21837	CA	ASP	D	462	-141.924	-18.130	39.353	1.00	59.12
21838	CB	ASP	D	462	-141.595	-17.211	40.532	1.00	59.07
21839	CG	ASP	D	462	-141.596	-15.763	40.144	1.00	58.94
21840	OD1	ASP	D	462	-142.050	-14.930	40.955	1.00	57.44
21841	OD2	ASP	D	462	-141.167	-15.370	39.037	1.00	60.22
21842	C	ASP	D	462	-141.668	-19.568	39.752	1.00	59.26
21843	O	ASP	D	462	-141.084	-19.831	40.804	1.00	59.45
21844	N	LYS	D	463	-142.099	-20.511	38.923	1.00	59.18
21845	CA	LYS	D	463	-141.795	-21.907	39.216	1.00	59.00
21846	CB	LYS	D	463	-143.052	-22.776	39.243	1.00	59.52
21847	CG	LYS	D	463	-143.458	-23.162	40.667	1.00	60.85
21848	CD	LYS	D	463	-142.289	-23.831	41.401	1.00	62.85
21849	CE	LYS	D	463	-142.425	-23.690	42.922	1.00	64.92
21850	NZ	LYS	D	463	-142.345	-22.260	43.400	1.00	65.38
21851	C	LYS	D	463	-140.748	-22.497	38.289	1.00	58.46
21852	O	LYS	D	463	-140.526	-22.010	37.181	1.00	58.19
21853	N	GLY	D	464	-140.093	-23.544	38.769	1.00	57.94
21854	CA	GLY	D	464	-139.066	-24.202	38.001	1.00	57.62
21855	C	GLY	D	464	-139.659	-24.968	36.846	1.00	57.48
21856	O	GLY	D	464	-140.497	-25.846	37.035	1.00	57.38
21857	N	LEU	D	465	-139.238	-24.621	35.640	1.00	57.33
21858	CA	LEU	D	465	-139.677	-25.347	34.464	1.00	57.18
21859	CB	LEU	D	465	-139.479	-24.516	33.198	1.00	57.23
21860	CG	LEU	D	465	-140.300	-23.225	33.212	1.00	56.97
21861	CD1	LEU	D	465	-140.474	-22.677	31.814	1.00	57.14
21862	CD2	LEU	D	465	-141.658	-23.480	33.839	1.00	57.78
21863	C	LEU	D	465	-138.870	-26.634	34.431	1.00	57.04
21864	O	LEU	D	465	-139.441	-27.728	34.406	1.00	57.23
21865	N	ARG	D	466	-137.545	-26.501	34.451	1.00	56.48
21866	CA	ARG	D	466	-136.669	-27.665	34.516	1.00	55.99
21867	CB	ARG	D	466	-136.913	-28.611	33.332	1.00	56.46
21868	CG	ARG	D	466	-135.962	-28.458	32.155	1.00	57.71
21869	CD	ARG	D	466	-136.392	-27.429	31.135	1.00	59.67

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 PM**

A	B	C	D	E	F	G	H	I	J
21870	NE	ARG	D	466	-137.825	-27.484	30.892	1.00	61.10
21871	CZ	ARG	D	466	-138.436	-26.808	29.934	1.00	61.87
21872	NH1	ARG	D	466	-139.750	-26.900	29.786	1.00	61.82
21873	NH2	ARG	D	466	-137.729	-26.038	29.118	1.00	63.21
21874	C	ARG	D	466	-135.183	-27.321	34.629	1.00	55.20
21875	O	ARG	D	466	-134.778	-26.172	34.471	1.00	54.90
21876	N	VAL	D	467	-134.387	-28.348	34.911	1.00	54.30
21877	CA	VAL	D	467	-132.940	-28.235	35.016	1.00	53.21
21878	CB	VAL	D	467	-132.379	-29.388	35.855	1.00	53.42
21879	CG1	VAL	D	467	-130.866	-29.275	35.982	1.00	53.35
21880	CG2	VAL	D	467	-133.048	-29.425	37.222	1.00	53.85
21881	C	VAL	D	467	-132.279	-28.300	33.638	1.00	52.47
21882	O	VAL	D	467	-132.426	-29.303	32.921	1.00	52.40
21883	N	LEU	D	468	-131.548	-27.239	33.279	1.00	50.89
21884	CA	LEU	D	468	-130.846	-27.163	31.995	1.00	49.70
21885	CB	LEU	D	468	-130.698	-25.708	31.543	1.00	49.44
21886	CG	LEU	D	468	-132.023	-25.027	31.199	1.00	49.27
21887	CD1	LEU	D	468	-131.810	-23.567	30.840	1.00	48.79
21888	CD2	LEU	D	468	-132.738	-25.778	30.060	1.00	49.05
21889	C	LEU	D	468	-129.482	-27.862	31.995	1.00	49.07
21890	O	LEU	D	468	-129.169	-28.622	31.084	1.00	48.54
21891	N	GLU	D	469	-128.664	-27.578	33.007	1.00	48.58
21892	CA	GLU	D	469	-127.357	-28.220	33.139	1.00	47.89
21893	CB	GLU	D	469	-126.288	-27.444	32.375	1.00	47.67
21894	CG	GLU	D	469	-124.891	-28.041	32.469	1.00	47.41
21895	CD	GLU	D	469	-124.799	-29.453	31.914	1.00	45.94
21896	OE1	GLU	D	469	-124.655	-30.393	32.725	1.00	45.51
21897	OE2	GLU	D	469	-124.838	-29.618	30.671	1.00	44.03
21898	C	GLU	D	469	-127.012	-28.323	34.623	1.00	47.83
21899	O	GLU	D	469	-127.058	-27.328	35.358	1.00	48.11
21900	N	ASP	D	470	-126.679	-29.522	35.079	1.00	47.04
21901	CA	ASP	D	470	-126.422	-29.701	36.501	1.00	46.35
21902	CB	ASP	D	470	-127.510	-30.573	37.110	1.00	46.59
21903	CG	ASP	D	470	-127.258	-32.053	36.895	1.00	47.45
21904	OD1	ASP	D	470	-127.874	-32.856	37.625	1.00	49.16
21905	OD2	ASP	D	470	-126.466	-32.507	36.034	1.00	47.48
21906	C	ASP	D	470	-125.043	-30.270	36.854	1.00	45.48
21907	O	ASP	D	470	-124.777	-30.538	38.010	1.00	45.18
21908	N	ASN	D	471	-124.189	-30.480	35.857	1.00	45.37
21909	CA	ASN	D	471	-122.825	-30.972	36.093	1.00	45.03
21910	CB	ASN	D	471	-122.002	-29.909	36.820	1.00	44.74
21911	CG	ASN	D	471	-121.718	-28.741	35.955	1.00	43.13
21912	OD1	ASN	D	471	-121.105	-28.887	34.912	1.00	43.43
21913	ND2	ASN	D	471	-122.199	-27.572	36.347	1.00	43.86
21914	C	ASN	D	471	-122.713	-32.284	36.850	1.00	45.61
21915	O	ASN	D	471	-121.718	-32.519	37.555	1.00	45.32
21916	N	SER	D	472	-123.725	-33.135	36.712	1.00	45.97
21917	CA	SER	D	472	-123.686	-34.434	37.358	1.00	46.60
21918	CB	SER	D	472	-124.987	-35.216	37.114	1.00	46.83
21919	OG	SER	D	472	-125.225	-35.407	35.734	1.00	45.94
21920	C	SER	D	472	-122.487	-35.202	36.830	1.00	46.97

FIGURE 3 PN

A	B	C	D	E	F	G	H	I	J
21921	O	SER	D	472	-121.896	-36.014	37.537	1.00	46.85
21922	N	ALA	D	473	-122.121	-34.932	35.585	1.00	47.64
21923	CA	ALA	D	473	-120.978	-35.600	34.986	1.00	48.90
21924	CB	ALA	D	473	-120.887	-35.269	33.506	1.00	48.66
21925	C	ALA	D	473	-119.685	-35.206	35.712	1.00	49.86
21926	O	ALA	D	473	-118.893	-36.065	36.113	1.00	49.97
21927	N	LEU	D	474	-119.479	-33.904	35.887	1.00	50.76
21928	CA	LEU	D	474	-118.289	-33.433	36.567	1.00	51.58
21929	CB	LEU	D	474	-118.187	-31.907	36.495	1.00	51.66
21930	CG	LEU	D	474	-117.148	-31.285	37.433	1.00	51.70
21931	CD1	LEU	D	474	-115.768	-31.859	37.156	1.00	51.48
21932	CD2	LEU	D	474	-117.137	-29.783	37.282	1.00	52.13
21933	C	LEU	D	474	-118.329	-33.884	38.010	1.00	52.25
21934	O	LEU	D	474	-117.316	-34.287	38.563	1.00	52.55
21935	N	ASP	D	475	-119.510	-33.843	38.613	1.00	53.48
21936	CA	ASP	D	475	-119.647	-34.187	40.018	1.00	54.86
21937	CB	ASP	D	475	-121.095	-34.027	40.483	1.00	54.92
21938	CG	ASP	D	475	-121.202	-33.806	41.979	1.00	55.85
21939	OD1	ASP	D	475	-121.574	-34.748	42.713	1.00	56.95
21940	OD2	ASP	D	475	-120.918	-32.714	42.517	1.00	57.34
21941	C	ASP	D	475	-119.215	-35.606	40.264	1.00	55.98
21942	O	ASP	D	475	-118.685	-35.926	41.330	1.00	56.18
21943	N	LYS	D	476	-119.457	-36.456	39.269	1.00	57.23
21944	CA	LYS	D	476	-119.158	-37.876	39.380	1.00	58.53
21945	CB	LYS	D	476	-119.741	-38.661	38.190	1.00	58.87
21946	CG	LYS	D	476	-119.473	-40.166	38.263	1.00	60.86
21947	CD	LYS	D	476	-119.859	-40.902	36.975	1.00	63.70
21948	CE	LYS	D	476	-121.293	-41.443	37.037	1.00	65.24
21949	NZ	LYS	D	476	-121.512	-42.417	38.155	1.00	65.26
21950	C	LYS	D	476	-117.668	-38.111	39.478	1.00	58.65
21951	O	LYS	D	476	-117.174	-38.640	40.478	1.00	58.69
21952	N	MET	D	477	-116.949	-37.705	38.439	1.00	59.23
21953	CA	MET	D	477	-115.508	-37.926	38.402	1.00	59.66
21954	CB	MET	D	477	-114.940	-37.608	37.026	1.00	59.96
21955	CG	MET	D	477	-115.338	-36.270	36.493	1.00	60.64
21956	SD	MET	D	477	-115.119	-36.282	34.726	1.00	63.61
21957	CE	MET	D	477	-113.501	-37.031	34.565	1.00	63.14
21958	C	MET	D	477	-114.762	-37.165	39.485	1.00	59.47
21959	O	MET	D	477	-113.581	-37.411	39.712	1.00	59.77
21960	N	LEU	D	478	-115.464	-36.265	40.164	1.00	59.19
21961	CA	LEU	D	478	-114.884	-35.493	41.256	1.00	58.93
21962	CB	LEU	D	478	-115.536	-34.109	41.325	1.00	58.81
21963	CG	LEU	D	478	-114.692	-32.859	41.069	1.00	58.86
21964	CD1	LEU	D	478	-115.604	-31.684	40.734	1.00	58.24
21965	CD2	LEU	D	478	-113.647	-33.065	39.981	1.00	58.27
21966	C	LEU	D	478	-115.003	-36.159	42.623	1.00	58.92
21967	O	LEU	D	478	-114.307	-35.776	43.564	1.00	58.54
21968	N	GLN	D	479	-115.877	-37.152	42.751	1.00	59.09
21969	CA	GLN	D	479	-116.070	-37.774	44.062	1.00	59.11
21970	CB	GLN	D	479	-117.383	-38.561	44.155	1.00	59.76
21971	CG	GLN	D	479	-118.090	-38.372	45.501	1.00	61.97

FIGURE 3 PO

A	B	C	D	E	F	G	H	I	J
21972	CD	GLN	D	479	-119.030	-39.524	45.872	1.00	65.23
21973	OE1	GLN	D	479	-119.557	-40.221	44.998	1.00	66.31
21974	NE2	GLN	D	479	-119.239	-39.718	47.175	1.00	66.00
21975	C	GLN	D	479	-114.879	-38.627	44.491	1.00	58.36
21976	O	GLN	D	479	-114.691	-38.874	45.688	1.00	58.00
21977	N	ASN	D	480	-114.082	-39.087	43.528	1.00	57.24
21978	CA	ASN	D	480	-112.867	-39.798	43.901	1.00	56.76
21979	CB	ASN	D	480	-112.788	-41.226	43.325	1.00	57.18
21980	CG	ASN	D	480	-112.287	-41.266	41.893	1.00	59.21
21981	OD1	ASN	D	480	-111.793	-42.301	41.428	1.00	60.24
21982	ND2	ASN	D	480	-112.408	-40.138	41.181	1.00	61.22
21983	C	ASN	D	480	-111.606	-38.965	43.648	1.00	55.75
21984	O	ASN	D	480	-110.628	-39.431	43.069	1.00	55.51
21985	N	VAL	D	481	-111.675	-37.706	44.067	1.00	54.57
21986	CA	VAL	D	481	-110.523	-36.817	44.069	1.00	53.34
21987	CB	VAL	D	481	-110.428	-35.930	42.802	1.00	53.46
21988	CG1	VAL	D	481	-111.781	-35.649	42.243	1.00	54.08
21989	CG2	VAL	D	481	-109.673	-34.652	43.080	1.00	53.22
21990	C	VAL	D	481	-110.594	-36.009	45.353	1.00	52.30
21991	O	VAL	D	481	-111.662	-35.561	45.759	1.00	52.13
21992	N	GLN	D	482	-109.462	-35.884	46.029	1.00	51.18
21993	CA	GLN	D	482	-109.410	-35.154	47.283	1.00	49.86
21994	CB	GLN	D	482	-108.156	-35.547	48.058	1.00	49.82
21995	CG	GLN	D	482	-108.002	-37.060	48.243	1.00	49.57
21996	CD	GLN	D	482	-106.867	-37.426	49.179	1.00	49.43
21997	OE1	GLN	D	482	-107.077	-37.558	50.384	1.00	50.82
21998	NE2	GLN	D	482	-105.659	-37.583	48.632	1.00	48.75
21999	C	GLN	D	482	-109.440	-33.651	47.000	1.00	49.29
22000	O	GLN	D	482	-108.401	-32.975	46.982	1.00	49.35
22001	N	MET	D	483	-110.645	-33.144	46.758	1.00	47.92
22002	CA	MET	D	483	-110.854	-31.737	46.467	1.00	46.56
22003	CB	MET	D	483	-112.204	-31.537	45.790	1.00	46.16
22004	CG	MET	D	483	-112.260	-32.154	44.444	1.00	45.99
22005	SD	MET	D	483	-111.154	-31.322	43.334	1.00	45.71
22006	CE	MET	D	483	-112.226	-30.069	42.717	1.00	43.82
22007	C	MET	D	483	-110.806	-30.911	47.732	1.00	45.76
22008	O	MET	D	483	-111.243	-31.360	48.796	1.00	45.75
22009	N	PRO	D	484	-110.291	-29.692	47.605	1.00	44.73
22010	CA	PRO	D	484	-110.197	-28.767	48.737	1.00	44.12
22011	CB	PRO	D	484	-109.288	-27.666	48.201	1.00	44.11
22012	CG	PRO	D	484	-109.485	-27.686	46.732	1.00	43.89
22013	CD	PRO	D	484	-109.759	-29.113	46.361	1.00	44.68
22014	C	PRO	D	484	-111.550	-28.172	49.044	1.00	43.51
22015	O	PRO	D	484	-112.436	-28.225	48.197	1.00	43.84
22016	N	SER	D	485	-111.722	-27.612	50.231	1.00	42.90
22017	CA	SER	D	485	-112.970	-26.908	50.509	1.00	42.75
22018	CB	SER	D	485	-113.632	-27.391	51.812	1.00	42.78
22019	OG	SER	D	485	-113.176	-26.684	52.952	1.00	43.62
22020	C	SER	D	485	-112.750	-25.386	50.498	1.00	42.19
22021	O	SER	D	485	-111.632	-24.893	50.312	1.00	41.86
22022	N	LYS	D	486	-113.827	-24.640	50.693	1.00	41.74

FIGURE 3 PP

A	B	C	D	E	F	G	H	I	J
22023	CA	LYS	D	486	-113.741	-23.195	50.686	1.00	40.78
22024	CB	LYS	D	486	-114.442	-22.654	49.452	1.00	40.90
22025	CG	LYS	D	486	-113.909	-21.320	48.975	1.00	41.55
22026	CD	LYS	D	486	-115.021	-20.426	48.472	1.00	40.25
22027	CE	LYS	D	486	-114.611	-19.660	47.244	1.00	39.87
22028	NZ	LYS	D	486	-115.636	-18.663	46.873	1.00	39.43
22029	C	LYS	D	486	-114.405	-22.643	51.925	1.00	40.36
22030	O	LYS	D	486	-115.550	-22.959	52.210	1.00	41.08
22031	N	LYS	D	487	-113.690	-21.828	52.674	1.00	39.57
22032	CA	LYS	D	487	-114.273	-21.202	53.839	1.00	39.62
22033	CB	LYS	D	487	-113.408	-21.440	55.084	1.00	39.82
22034	CG	LYS	D	487	-113.183	-20.201	55.917	1.00	41.25
22035	CD	LYS	D	487	-113.978	-20.210	57.219	1.00	43.92
22036	CE	LYS	D	487	-113.064	-20.381	58.418	1.00	45.08
22037	NZ	LYS	D	487	-113.720	-19.919	59.680	1.00	46.72
22038	C	LYS	D	487	-114.409	-19.720	53.518	1.00	39.47
22039	O	LYS	D	487	-113.460	-19.069	53.073	1.00	39.19
22040	N	LEU	D	488	-115.612	-19.204	53.694	1.00	39.33
22041	CA	LEU	D	488	-115.901	-17.821	53.388	1.00	39.38
22042	CB	LEU	D	488	-116.982	-17.730	52.315	1.00	38.75
22043	CG	LEU	D	488	-117.483	-16.321	52.013	1.00	38.45
22044	CD1	LEU	D	488	-116.420	-15.484	51.271	1.00	35.08
22045	CD2	LEU	D	488	-118.762	-16.400	51.225	1.00	35.39
22046	C	LEU	D	488	-116.371	-17.176	54.670	1.00	40.14
22047	O	LEU	D	488	-117.465	-17.446	55.153	1.00	39.95
22048	N	ASP	D	489	-115.528	-16.332	55.236	1.00	40.97
22049	CA	ASP	D	489	-115.842	-15.747	56.514	1.00	42.21
22050	CB	ASP	D	489	-115.194	-16.578	57.625	1.00	42.33
22051	CG	ASP	D	489	-116.020	-16.614	58.877	1.00	43.32
22052	OD1	ASP	D	489	-115.962	-17.644	59.590	1.00	46.30
22053	OD2	ASP	D	489	-116.772	-15.677	59.223	1.00	43.96
22054	C	ASP	D	489	-115.302	-14.331	56.543	1.00	42.65
22055	O	ASP	D	489	-114.798	-13.834	55.547	1.00	42.81
22056	N	PHE	D	490	-115.384	-13.692	57.697	1.00	43.33
22057	CA	PHE	D	490	-114.902	-12.341	57.811	1.00	44.25
22058	CB	PHE	D	490	-116.082	-11.381	57.802	1.00	44.26
22059	CG	PHE	D	490	-117.097	-11.679	58.855	1.00	45.55
22060	CD1	PHE	D	490	-118.185	-12.488	58.574	1.00	46.52
22061	CE1	PHE	D	490	-119.128	-12.771	59.548	1.00	47.79
22062	CZ	PHE	D	490	-118.981	-12.250	60.831	1.00	47.73
22063	CE2	PHE	D	490	-117.895	-11.451	61.124	1.00	48.42
22064	CD2	PHE	D	490	-116.956	-11.167	60.133	1.00	47.31
22065	C	PHE	D	490	-114.130	-12.170	59.097	1.00	44.63
22066	O	PHE	D	490	-114.258	-12.977	60.012	1.00	44.70
22067	N	ILE	D	491	-113.310	-11.125	59.150	1.00	45.06
22068	CA	ILE	D	491	-112.630	-10.758	60.380	1.00	45.82
22069	CB	ILE	D	491	-111.106	-10.848	60.269	1.00	45.63
22070	CG1	ILE	D	491	-110.586	-9.894	59.195	1.00	44.97
22071	CD1	ILE	D	491	-109.118	-9.597	59.301	1.00	44.84
22072	CG2	ILE	D	491	-110.678	-12.279	60.010	1.00	45.05
22073	C	ILE	D	491	-113.051	-9.339	60.668	1.00	46.97

FIGURE 3 PQ

A	B	C	D	E	F	G	H	I	J
22074	O	ILE	D	491	-113.623	-8.662	59.805	1.00	47.13
22075	N	ILE	D	492	-112.785	-8.880	61.878	1.00	48.24
22076	CA	ILE	D	492	-113.196	-7.539	62.257	1.00	49.65
22077	CB	ILE	D	492	-114.083	-7.594	63.515	1.00	49.69
22078	CG1	ILE	D	492	-115.388	-8.340	63.227	1.00	50.20
22079	CD1	ILE	D	492	-116.570	-7.802	64.028	1.00	51.67
22080	CG2	ILE	D	492	-114.407	-6.194	63.986	1.00	50.11
22081	C	ILE	D	492	-111.975	-6.650	62.469	1.00	50.37
22082	O	ILE	D	492	-111.155	-6.918	63.349	1.00	50.50
22083	N	LEU	D	493	-111.854	-5.601	61.652	1.00	51.54
22084	CA	LEU	D	493	-110.694	-4.701	61.712	1.00	52.52
22085	CB	LEU	D	493	-110.184	-4.341	60.317	1.00	52.24
22086	CG	LEU	D	493	-108.912	-5.146	60.058	1.00	52.45
22087	CD1	LEU	D	493	-108.680	-5.458	58.593	1.00	51.55
22088	CD2	LEU	D	493	-108.969	-6.428	60.879	1.00	53.26
22089	C	LEU	D	493	-110.868	-3.466	62.603	1.00	53.48
22090	O	LEU	D	493	-110.905	-3.595	63.823	1.00	53.92
22091	N	ASN	D	494	-110.922	-2.258	62.057	1.00	54.20
22092	CA	ASN	D	494	-111.136	-1.164	62.993	1.00	54.48
22093	CB	ASN	D	494	-111.206	0.200	62.314	1.00	55.01
22094	CG	ASN	D	494	-109.883	0.958	62.401	1.00	56.92
22095	OD1	ASN	D	494	-109.450	1.342	63.490	1.00	59.72
22096	ND2	ASN	D	494	-109.236	1.170	61.260	1.00	58.60
22097	C	ASN	D	494	-112.398	-1.541	63.762	1.00	54.11
22098	O	ASN	D	494	-112.324	-2.095	64.861	1.00	54.46
22099	N	GLU	D	495	-113.557	-1.298	63.174	1.00	53.65
22100	CA	GLU	D	495	-114.784	-1.772	63.787	1.00	53.11
22101	CB	GLU	D	495	-115.612	-0.612	64.336	1.00	54.09
22102	CG	GLU	D	495	-116.551	-1.027	65.455	1.00	56.83
22103	CD	GLU	D	495	-115.815	-1.225	66.764	1.00	60.74
22104	OE1	GLU	D	495	-115.353	-0.204	67.326	1.00	62.68
22105	OE2	GLU	D	495	-115.693	-2.390	67.228	1.00	62.25
22106	C	GLU	D	495	-115.573	-2.506	62.726	1.00	51.60
22107	O	GLU	D	495	-116.674	-2.987	62.984	1.00	51.96
22108	N	THR	D	496	-114.997	-2.607	61.532	1.00	49.33
22109	CA	THR	D	496	-115.736	-3.155	60.404	1.00	46.76
22110	CB	THR	D	496	-115.643	-2.205	59.174	1.00	46.89
22111	OG1	THR	D	496	-114.334	-2.268	58.610	1.00	47.10
22112	CG2	THR	D	496	-115.760	-0.750	59.604	1.00	46.58
22113	C	THR	D	496	-115.414	-4.596	60.007	1.00	44.94
22114	O	THR	D	496	-114.310	-5.103	60.190	1.00	44.71
22115	N	LYS	D	497	-116.432	-5.229	59.450	1.00	42.85
22116	CA	LYS	D	497	-116.389	-6.584	58.954	1.00	40.72
22117	CB	LYS	D	497	-117.838	-7.010	58.705	1.00	41.43
22118	CG	LYS	D	497	-118.239	-8.401	59.150	1.00	43.19
22119	CD	LYS	D	497	-119.544	-8.317	59.940	1.00	44.70
22120	CE	LYS	D	497	-120.511	-9.436	59.581	1.00	46.88
22121	NZ	LYS	D	497	-121.826	-9.209	60.266	1.00	47.14
22122	C	LYS	D	497	-115.664	-6.549	57.618	1.00	38.35
22123	O	LYS	D	497	-116.027	-5.783	56.745	1.00	38.22
22124	N	PHE	D	498	-114.630	-7.357	57.464	1.00	35.89

FIGURE 3 PR

A	B	C	D	E	F	G	H	I	J
22125	CA	PHE	D	498	-113.940	-7.479	56.194	1.00	33.69
22126	CB	PHE	D	498	-112.538	-6.882	56.251	1.00	33.54
22127	CG	PHE	D	498	-112.530	-5.388	56.233	1.00	33.09
22128	CD1	PHE	D	498	-112.820	-4.705	55.075	1.00	32.69
22129	CE1	PHE	D	498	-112.833	-3.315	55.052	1.00	32.08
22130	CZ	PHE	D	498	-112.555	-2.609	56.197	1.00	33.54
22131	CE2	PHE	D	498	-112.269	-3.286	57.373	1.00	32.77
22132	CD2	PHE	D	498	-112.263	-4.665	57.386	1.00	32.47
22133	C	PHE	D	498	-113.892	-8.949	55.889	1.00	32.73
22134	O	PHE	D	498	-113.480	-9.749	56.735	1.00	32.65
22135	N	TRP	D	499	-114.311	-9.299	54.681	1.00	31.63
22136	CA	TRP	D	499	-114.424	-10.691	54.261	1.00	31.01
22137	CB	TRP	D	499	-115.607	-10.847	53.308	1.00	31.14
22138	CG	TRP	D	499	-116.912	-10.612	53.987	1.00	31.28
22139	CD1	TRP	D	499	-117.454	-9.408	54.333	1.00	30.35
22140	NE1	TRP	D	499	-118.661	-9.597	54.962	1.00	31.03
22141	CE2	TRP	D	499	-118.916	-10.944	55.037	1.00	32.13
22142	CD2	TRP	D	499	-117.832	-11.610	54.434	1.00	31.56
22143	CE3	TRP	D	499	-117.848	-13.007	54.390	1.00	33.17
22144	CZ3	TRP	D	499	-118.930	-13.683	54.927	1.00	32.84
22145	CH2	TRP	D	499	-119.996	-12.986	55.513	1.00	32.25
22146	CZ2	TRP	D	499	-120.010	-11.625	55.573	1.00	31.84
22147	C	TRP	D	499	-113.190	-11.274	53.607	1.00	30.65
22148	O	TRP	D	499	-112.428	-10.574	52.949	1.00	30.69
22149	N	TYR	D	500	-113.016	-12.580	53.789	1.00	30.45
22150	CA	TYR	D	500	-111.914	-13.302	53.214	1.00	30.20
22151	CB	TYR	D	500	-110.790	-13.445	54.234	1.00	30.96
22152	CG	TYR	D	500	-111.094	-14.361	55.402	1.00	30.58
22153	CD1	TYR	D	500	-110.852	-15.720	55.309	1.00	31.42
22154	CE1	TYR	D	500	-111.109	-16.571	56.357	1.00	32.91
22155	CZ	TYR	D	500	-111.616	-16.073	57.542	1.00	34.02
22156	OH	TYR	D	500	-111.857	-16.968	58.578	1.00	34.89
22157	CE2	TYR	D	500	-111.865	-14.708	57.673	1.00	31.52
22158	CD2	TYR	D	500	-111.603	-13.863	56.600	1.00	31.02
22159	C	TYR	D	500	-112.409	-14.666	52.843	1.00	30.46
22160	O	TYR	D	500	-113.439	-15.104	53.346	1.00	30.38
22161	N	GLN	D	501	-111.685	-15.327	51.943	1.00	30.25
22162	CA	GLN	D	501	-111.965	-16.706	51.593	1.00	29.73
22163	CB	GLN	D	501	-112.640	-16.824	50.227	1.00	29.03
22164	CG	GLN	D	501	-111.724	-16.668	49.024	1.00	26.43
22165	CD	GLN	D	501	-112.467	-16.885	47.703	1.00	23.64
22166	OE1	GLN	D	501	-113.668	-16.622	47.614	1.00	21.69
22167	NE2	GLN	D	501	-111.759	-17.360	46.689	1.00	19.81
22168	C	GLN	D	501	-110.653	-17.494	51.648	1.00	30.51
22169	O	GLN	D	501	-109.569	-16.928	51.534	1.00	30.08
22170	N	MET	D	502	-110.766	-18.797	51.877	1.00	31.53
22171	CA	MET	D	502	-109.622	-19.682	51.953	1.00	32.54
22172	CB	MET	D	502	-109.324	-20.061	53.404	1.00	32.70
22173	CG	MET	D	502	-108.513	-19.042	54.188	1.00	34.45
22174	SD	MET	D	502	-108.298	-19.546	55.914	1.00	35.68
22175	CE	MET	D	502	-107.112	-18.330	56.520	1.00	34.73

FIGURE 3 PS

A	B	C	D	E	F	G	H	I	J
22176	C	MET	D	502	-109.930	-20.951	51.188	1.00	33.44
22177	O	MET	D	502	-110.969	-21.568	51.401	1.00	33.39
22178	N	ILE	D	503	-109.043	-21.321	50.276	1.00	34.24
22179	CA	ILE	D	503	-109.140	-22.600	49.625	1.00	35.32
22180	CB	ILE	D	503	-108.522	-22.555	48.237	1.00	35.54
22181	CG1	ILE	D	503	-109.022	-21.318	47.470	1.00	35.46
22182	CD1	ILE	D	503	-110.530	-21.194	47.404	1.00	34.04
22183	CG2	ILE	D	503	-108.834	-23.835	47.467	1.00	34.63
22184	C	ILE	D	503	-108.339	-23.510	50.541	1.00	36.69
22185	O	ILE	D	503	-107.110	-23.450	50.581	1.00	36.53
22186	N	LEU	D	504	-109.044	-24.332	51.313	1.00	38.09
22187	CA	LEU	D	504	-108.397	-25.207	52.279	1.00	38.64
22188	CB	LEU	D	504	-109.299	-25.379	53.491	1.00	38.53
22189	CG	LEU	D	504	-109.571	-24.066	54.222	1.00	38.04
22190	CD1	LEU	D	504	-110.703	-24.193	55.242	1.00	36.84
22191	CD2	LEU	D	504	-108.285	-23.587	54.884	1.00	38.21
22192	C	LEU	D	504	-108.071	-26.551	51.688	1.00	39.40
22193	O	LEU	D	504	-108.885	-27.132	50.983	1.00	39.88
22194	N	PRO	D	505	-106.857	-27.021	51.937	1.00	40.67
22195	CA	PRO	D	505	-106.436	-28.366	51.525	1.00	41.89
22196	CB	PRO	D	505	-105.048	-28.497	52.153	1.00	41.89
22197	CG	PRO	D	505	-104.568	-27.097	52.306	1.00	41.09
22198	CD	PRO	D	505	-105.777	-26.277	52.611	1.00	40.38
22199	C	PRO	D	505	-107.348	-29.432	52.129	1.00	43.15
22200	O	PRO	D	505	-107.765	-29.284	53.282	1.00	42.92
22201	N	PRO	D	506	-107.661	-30.471	51.359	1.00	44.38
22202	CA	PRO	D	506	-108.512	-31.576	51.821	1.00	45.63
22203	CB	PRO	D	506	-108.338	-32.628	50.713	1.00	45.81
22204	CG	PRO	D	506	-107.133	-32.141	49.920	1.00	44.97
22205	CD	PRO	D	506	-107.248	-30.661	49.959	1.00	44.76
22206	C	PRO	D	506	-108.060	-32.138	53.167	1.00	46.50
22207	O	PRO	D	506	-106.859	-32.206	53.420	1.00	46.58
22208	N	HIS	D	507	-109.010	-32.515	54.019	1.00	47.48
22209	CA	HIS	D	507	-108.696	-33.051	55.351	1.00	48.38
22210	CB	HIS	D	507	-107.775	-34.271	55.253	1.00	48.50
22211	CG	HIS	D	507	-108.183	-35.249	54.192	1.00	49.31
22212	ND1	HIS	D	507	-109.479	-35.702	54.053	1.00	49.86
22213	CE1	HIS	D	507	-109.546	-36.537	53.031	1.00	50.44
22214	NE2	HIS	D	507	-108.339	-36.645	52.503	1.00	50.57
22215	CD2	HIS	D	507	-107.468	-35.851	53.211	1.00	49.82
22216	C	HIS	D	507	-108.062	-31.971	56.218	1.00	48.86
22217	O	HIS	D	507	-107.338	-32.255	57.172	1.00	49.17
22218	N	PHE	D	508	-108.343	-30.722	55.873	1.00	49.26
22219	CA	PHE	D	508	-107.828	-29.590	56.615	1.00	49.25
22220	CB	PHE	D	508	-108.662	-28.344	56.310	1.00	49.03
22221	CG	PHE	D	508	-108.251	-27.149	57.094	1.00	48.15
22222	CD1	PHE	D	508	-106.923	-26.739	57.106	1.00	47.86
22223	CE1	PHE	D	508	-106.521	-25.648	57.837	1.00	46.02
22224	CZ	PHE	D	508	-107.452	-24.943	58.556	1.00	48.39
22225	CE2	PHE	D	508	-108.790	-25.342	58.553	1.00	48.71
22226	CD2	PHE	D	508	-109.178	-26.443	57.828	1.00	47.35



FIGURE 3 PT

A	B	C	D	E	F	G	H	I	J
22227	C	PHE	D	508	-107.857	-29.910	58.101	1.00	49.48
22228	O	PHE	D	508	-108.861	-30.396	58.617	1.00	49.51
22229	N	ASP	D	509	-106.754	-29.620	58.780	1.00	49.87
22230	CA	ASP	D	509	-106.582	-29.939	60.196	1.00	50.47
22231	CB	ASP	D	509	-105.602	-31.119	60.309	1.00	50.55
22232	CG	ASP	D	509	-105.216	-31.460	61.747	1.00	50.89
22233	OD1	ASP	D	509	-105.729	-30.849	62.708	1.00	51.30
22234	OD2	ASP	D	509	-104.389	-32.353	62.003	1.00	50.81
22235	C	ASP	D	509	-106.055	-28.715	60.937	1.00	50.61
22236	O	ASP	D	509	-104.914	-28.329	60.762	1.00	51.02
22237	N	LYS	D	510	-106.884	-28.115	61.778	1.00	51.30
22238	CA	LYS	D	510	-106.497	-26.912	62.511	1.00	51.94
22239	CB	LYS	D	510	-107.683	-26.370	63.308	1.00	52.13
22240	CG	LYS	D	510	-108.946	-26.229	62.476	1.00	53.76
22241	CD	LYS	D	510	-109.630	-27.587	62.196	1.00	55.82
22242	CE	LYS	D	510	-110.779	-27.432	61.182	1.00	56.53
22243	NZ	LYS	D	510	-111.306	-28.726	60.657	1.00	56.25
22244	C	LYS	D	510	-105.274	-27.117	63.414	1.00	51.89
22245	O	LYS	D	510	-104.624	-26.139	63.823	1.00	52.13
22246	N	SER	D	511	-104.987	-28.385	63.718	1.00	51.76
22247	CA	SER	D	511	-103.810	-28.790	64.483	1.00	51.57
22248	CB	SER	D	511	-103.806	-30.326	64.722	1.00	51.56
22249	OG	SER	D	511	-104.808	-30.721	65.636	1.00	52.43
22250	C	SER	D	511	-102.566	-28.441	63.678	1.00	50.79
22251	O	SER	D	511	-101.568	-27.977	64.221	1.00	50.95
22252	N	LYS	D	512	-102.631	-28.712	62.376	1.00	49.63
22253	CA	LYS	D	512	-101.477	-28.545	61.486	1.00	48.88
22254	CB	LYS	D	512	-101.690	-29.310	60.170	1.00	48.91
22255	CG	LYS	D	512	-101.353	-30.796	60.237	1.00	49.94
22256	CD	LYS	D	512	-101.394	-31.479	58.853	1.00	50.87
22257	CE	LYS	D	512	-100.707	-32.853	58.905	1.00	52.87
22258	NZ	LYS	D	512	-101.267	-33.870	57.941	1.00	54.85
22259	C	LYS	D	512	-101.101	-27.094	61.188	1.00	47.84
22260	O	LYS	D	512	-101.847	-26.163	61.472	1.00	47.97
22261	N	LYS	D	513	-99.920	-26.902	60.627	1.00	46.79
22262	CA	LYS	D	513	-99.504	-25.558	60.251	1.00	45.61
22263	CB	LYS	D	513	-98.282	-25.121	61.044	1.00	45.55
22264	CG	LYS	D	513	-98.603	-24.846	62.497	1.00	46.64
22265	CD	LYS	D	513	-97.743	-23.746	63.075	1.00	46.94
22266	CE	LYS	D	513	-98.316	-23.259	64.399	1.00	49.00
22267	NZ	LYS	D	513	-98.235	-21.737	64.532	1.00	49.85
22268	C	LYS	D	513	-99.255	-25.524	58.757	1.00	44.59
22269	O	LYS	D	513	-98.264	-26.061	58.267	1.00	44.12
22270	N	TYR	D	514	-100.171	-24.908	58.020	1.00	43.69
22271	CA	TYR	D	514	-100.033	-24.916	56.570	1.00	43.23
22272	CB	TYR	D	514	-101.392	-25.021	55.892	1.00	43.28
22273	CG	TYR	D	514	-102.168	-26.271	56.231	1.00	43.54
22274	CD1	TYR	D	514	-102.218	-27.332	55.351	1.00	43.92
22275	CE1	TYR	D	514	-102.933	-28.470	55.649	1.00	45.73
22276	CZ	TYR	D	514	-103.620	-28.556	56.841	1.00	45.89
22277	OH	TYR	D	514	-104.330	-29.691	57.133	1.00	46.74

FIGURE 3 PU

A	B	C	D	E	F	G	H	I	J
22278	CE2	TYR	D	514	-103.587	-27.518	57.736	1.00	45.40
22279	CD2	TYR	D	514	-102.862	-26.379	57.427	1.00	44.60
22280	C	TYR	D	514	-99.290	-23.724	56.006	1.00	42.59
22281	O	TYR	D	514	-99.398	-22.611	56.514	1.00	42.05
22282	N	PRO	D	515	-98.513	-23.982	54.960	1.00	42.36
22283	CA	PRO	D	515	-97.865	-22.922	54.202	1.00	42.34
22284	CB	PRO	D	515	-97.008	-23.697	53.213	1.00	42.20
22285	CG	PRO	D	515	-97.773	-24.933	53.041	1.00	42.49
22286	CD	PRO	D	515	-98.160	-25.310	54.438	1.00	42.14
22287	C	PRO	D	515	-98.949	-22.201	53.431	1.00	42.45
22288	O	PRO	D	515	-100.132	-22.569	53.429	1.00	41.35
22289	OXT	PRO	D	515	-98.641	-21.219	52.766	1.00	43.57
22290	N	LEU	D	516	-98.960	-20.077	53.844	1.00	31.95
22291	CA	LEU	D	516	-100.197	-19.740	53.113	1.00	30.92
22292	CB	LEU	D	516	-101.122	-18.957	54.031	1.00	31.48
22293	CG	LEU	D	516	-102.410	-18.366	53.469	1.00	32.65
22294	CD1	LEU	D	516	-102.137	-16.938	53.024	1.00	34.39
22295	CD2	LEU	D	516	-103.453	-18.376	54.569	1.00	33.16
22296	C	LEU	D	516	-99.794	-18.924	51.899	1.00	30.86
22297	O	LEU	D	516	-98.681	-18.396	51.840	1.00	30.71
22298	N	LEU	D	517	-100.685	-18.880	50.912	1.00	29.90
22299	CA	LEU	D	517	-100.508	-18.081	49.728	1.00	28.83
22300	CB	LEU	D	517	-100.500	-18.953	48.473	1.00	28.59
22301	CG	LEU	D	517	-100.426	-18.150	47.174	1.00	29.21
22302	CD1	LEU	D	517	-100.439	-19.035	45.925	1.00	27.67
22303	CD2	LEU	D	517	-99.206	-17.196	47.170	1.00	28.21
22304	C	LEU	D	517	-101.673	-17.098	49.668	1.00	28.95
22305	O	LEU	D	517	-102.843	-17.503	49.539	1.00	28.88
22306	N	LEU	D	518	-101.349	-15.810	49.777	1.00	28.01
22307	CA	LEU	D	518	-102.338	-14.745	49.681	1.00	27.58
22308	CB	LEU	D	518	-101.879	-13.519	50.470	1.00	27.31
22309	CG	LEU	D	518	-102.951	-12.446	50.616	1.00	28.02
22310	CD1	LEU	D	518	-104.293	-13.056	51.060	1.00	27.01
22311	CD2	LEU	D	518	-102.494	-11.371	51.585	1.00	29.52
22312	C	LEU	D	518	-102.589	-14.375	48.211	1.00	27.23
22313	O	LEU	D	518	-101.708	-13.849	47.524	1.00	26.48
22314	N	ASP	D	519	-103.794	-14.677	47.733	1.00	27.06
22315	CA	ASP	D	519	-104.181	-14.391	46.350	1.00	27.13
22316	CB	ASP	D	519	-105.190	-15.442	45.858	1.00	27.78
22317	CG	ASP	D	519	-105.558	-15.257	44.394	1.00	29.59
22318	OD1	ASP	D	519	-106.065	-16.214	43.791	1.00	26.91
22319	OD2	ASP	D	519	-105.351	-14.191	43.764	1.00	33.79
22320	C	ASP	D	519	-104.808	-13.000	46.324	1.00	26.13
22321	O	ASP	D	519	-105.915	-12.827	46.806	1.00	25.43
22322	N	VAL	D	520	-104.094	-12.008	45.787	1.00	25.46
22323	CA	VAL	D	520	-104.589	-10.646	45.858	1.00	24.15
22324	CB	VAL	D	520	-103.584	-9.692	46.605	1.00	24.63
22325	CG1	VAL	D	520	-102.264	-9.584	45.883	1.00	24.11
22326	CG2	VAL	D	520	-104.178	-8.316	46.774	1.00	23.64
22327	C	VAL	D	520	-104.935	-9.991	44.553	1.00	23.88
22328	O	VAL	D	520	-104.271	-10.204	43.532	1.00	23.79

FIGURE 3 PV

A	B	C	D	E	F	G	H	I	J
22329	N	TYR	D	521	-105.996	-9.187	44.585	1.00	23.58
22330	CA	TYR	D	521	-106.262	-8.275	43.485	1.00	22.82
22331	CB	TYR	D	521	-107.542	-8.584	42.725	1.00	23.10
22332	CG	TYR	D	521	-107.669	-7.674	41.510	1.00	24.19
22333	CD1	TYR	D	521	-108.651	-6.681	41.453	1.00	22.84
22334	CE1	TYR	D	521	-108.755	-5.837	40.348	1.00	25.15
22335	CZ	TYR	D	521	-107.842	-5.969	39.300	1.00	25.26
22336	OH	TYR	D	521	-107.905	-5.133	38.220	1.00	26.53
22337	CE2	TYR	D	521	-106.864	-6.943	39.333	1.00	25.44
22338	CD2	TYR	D	521	-106.773	-7.787	40.441	1.00	24.42
22339	C	TYR	D	521	-106.306	-6.906	44.122	1.00	22.83
22340	O	TYR	D	521	-105.392	-6.084	43.946	1.00	23.01
22341	N	ALA	D	522	-107.371	-6.662	44.863	1.00	22.47
22342	CA	ALA	D	522	-107.460	-5.494	45.727	1.00	22.89
22343	CB	ALA	D	522	-106.274	-5.457	46.713	1.00	22.69
22344	C	ALA	D	522	-107.590	-4.161	45.031	1.00	23.27
22345	O	ALA	D	522	-107.339	-3.122	45.656	1.00	23.27
22346	N	GLY	D	523	-107.964	-4.179	43.754	1.00	23.25
22347	CA	GLY	D	523	-108.228	-2.941	43.044	1.00	23.46
22348	C	GLY	D	523	-109.525	-2.363	43.562	1.00	23.53
22349	O	GLY	D	523	-110.302	-3.045	44.218	1.00	24.01
22350	N	PRO	D	524	-109.779	-1.101	43.270	1.00	23.81
22351	CA	PRO	D	524	-111.034	-0.464	43.701	1.00	23.35
22352	CB	PRO	D	524	-110.958	0.924	43.088	1.00	22.72
22353	CG	PRO	D	524	-109.504	1.158	42.890	1.00	23.47
22354	CD	PRO	D	524	-108.893	-0.175	42.545	1.00	23.33
22355	C	PRO	D	524	-112.257	-1.215	43.206	1.00	23.56
22356	O	PRO	D	524	-112.310	-1.632	42.045	1.00	22.25
22357	N	CYS	D	525	-113.213	-1.396	44.123	1.00	23.85
22358	CA	CYS	D	525	-114.442	-2.133	43.883	1.00	24.64
22359	CB	CYS	D	525	-115.325	-1.457	42.816	1.00	24.68
22360	SG	CYS	D	525	-117.079	-1.893	42.910	1.00	27.11
22361	C	CYS	D	525	-114.201	-3.605	43.551	1.00	24.37
22362	O	CYS	D	525	-115.053	-4.260	43.009	1.00	25.04
22363	N	SER	D	526	-113.047	-4.137	43.884	1.00	24.74
22364	CA	SER	D	526	-112.831	-5.541	43.611	1.00	25.47
22365	CB	SER	D	526	-111.353	-5.879	43.649	1.00	25.00
22366	OG	SER	D	526	-110.870	-5.697	44.965	1.00	26.65
22367	C	SER	D	526	-113.539	-6.373	44.674	1.00	25.58
22368	O	SER	D	526	-114.006	-5.853	45.694	1.00	25.12
22369	N	GLN	D	527	-113.597	-7.665	44.408	1.00	25.65
22370	CA	GLN	D	527	-114.135	-8.629	45.318	1.00	26.62
22371	CB	GLN	D	527	-115.634	-8.825	45.097	1.00	26.82
22372	CG	GLN	D	527	-116.280	-9.642	46.207	1.00	27.95
22373	CD	GLN	D	527	-117.803	-9.657	46.152	1.00	28.44
22374	OE1	GLN	D	527	-118.407	-10.192	45.204	1.00	28.61
22375	NE2	GLN	D	527	-118.424	-9.077	47.166	1.00	27.33
22376	C	GLN	D	527	-113.434	-9.907	44.989	1.00	27.21
22377	O	GLN	D	527	-113.576	-10.406	43.888	1.00	27.15
22378	N	LYS	D	528	-112.661	-10.430	45.934	1.00	28.38
22379	CA	LYS	D	528	-111.977	-11.690	45.740	1.00	29.21

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 PW**

A	B	C	D	E	F	G	H	I	J
22380	CB	LYS	D	528	-110.469	-11.517	45.892	1.00	29.88
22381	CG	LYS	D	528	-109.811	-10.599	44.854	1.00	31.00
22382	CD	LYS	D	528	-109.819	-11.175	43.455	1.00	29.85
22383	CE	LYS	D	528	-109.210	-12.545	43.375	1.00	32.75
22384	NZ	LYS	D	528	-107.963	-12.709	44.124	1.00	32.18
22385	C	LYS	D	528	-112.482	-12.710	46.743	1.00	29.69
22386	O	LYS	D	528	-112.047	-13.844	46.746	1.00	28.93
22387	N	ALA	D	529	-113.362	-12.293	47.641	1.00	31.26
22388	CA	ALA	D	529	-113.948	-13.252	48.571	1.00	32.56
22389	CB	ALA	D	529	-113.970	-12.708	49.973	1.00	32.17
22390	C	ALA	D	529	-115.357	-13.498	48.054	1.00	33.38
22391	O	ALA	D	529	-116.234	-12.672	48.299	1.00	33.84
22392	N	ASP	D	530	-115.536	-14.607	47.319	1.00	34.00
22393	CA	ASP	D	530	-116.783	-14.967	46.606	1.00	35.36
22394	CB	ASP	D	530	-116.490	-15.349	45.126	1.00	35.29
22395	CG	ASP	D	530	-115.969	-14.213	44.287	1.00	38.56
22396	OD1	ASP	D	530	-116.423	-14.084	43.138	1.00	41.15
22397	OD2	ASP	D	530	-115.062	-13.420	44.632	1.00	45.19
22398	C	ASP	D	530	-117.403	-16.253	47.157	1.00	34.96
22399	O	ASP	D	530	-116.764	-16.985	47.886	1.00	35.34
22400	N	THR	D	531	-118.630	-16.553	46.741	1.00	34.45
22401	CA	THR	D	531	-119.231	-17.849	47.016	1.00	34.17
22402	CB	THR	D	531	-120.712	-17.756	47.493	1.00	34.07
22403	OG1	THR	D	531	-121.523	-17.144	46.477	1.00	34.32
22404	CG2	THR	D	531	-120.866	-16.824	48.689	1.00	33.95
22405	C	THR	D	531	-119.205	-18.586	45.695	1.00	34.05
22406	O	THR	D	531	-120.026	-19.455	45.466	1.00	33.61
22407	N	VAL	D	532	-118.288	-18.198	44.807	1.00	33.97
22408	CA	VAL	D	532	-118.193	-18.819	43.487	1.00	33.24
22409	CB	VAL	D	532	-117.643	-17.840	42.418	1.00	33.74
22410	CG1	VAL	D	532	-117.397	-18.559	41.073	1.00	31.82
22411	CG2	VAL	D	532	-118.593	-16.654	42.224	1.00	32.78
22412	C	VAL	D	532	-117.344	-20.082	43.507	1.00	33.28
22413	O	VAL	D	532	-116.378	-20.193	44.268	1.00	32.79
22414	N	PHE	D	533	-117.723	-21.039	42.667	1.00	33.08
22415	CA	PHE	D	533	-116.998	-22.291	42.566	1.00	32.91
22416	CB	PHE	D	533	-117.936	-23.465	42.297	1.00	33.19
22417	CG	PHE	D	533	-117.209	-24.742	42.033	1.00	33.43
22418	CD1	PHE	D	533	-116.675	-25.468	43.079	1.00	33.91
22419	CB1	PHE	D	533	-115.974	-26.632	42.848	1.00	33.49
22420	CZ	PHE	D	533	-115.793	-27.068	41.569	1.00	33.77
22421	CE2	PHE	D	533	-116.305	-26.341	40.509	1.00	35.32
22422	CD2	PHE	D	533	-116.999	-25.180	40.743	1.00	33.72
22423	C	PHE	D	533	-116.028	-22.207	41.428	1.00	32.73
22424	O	PHE	D	533	-116.404	-21.924	40.304	1.00	32.88
22425	N	ARG	D	534	-114.773	-22.493	41.703	1.00	33.21
22426	CA	ARG	D	534	-113.764	-22.376	40.675	1.00	33.45
22427	CB	ARG	D	534	-112.917	-21.111	40.906	1.00	34.03
22428	CG	ARG	D	534	-113.685	-19.780	40.894	1.00	33.35
22429	CD	ARG	D	534	-112.769	-18.543	40.923	1.00	33.39
22430	NE	ARG	D	534	-113.530	-17.303	40.775	1.00	32.63

FIGURE 3 PX

A	B	C	D	E	F	G	H	I	J
22431	CZ	ARG	D	534	-114.159	-16.700	41.771	1.00	30.97
22432	NH1	ARG	D	534	-114.862	-15.592	41.543	1.00	30.56
22433	NH2	ARG	D	534	-114.100	-17.216	42.991	1.00	27.55
22434	C	ARG	D	534	-112.844	-23.578	40.649	1.00	33.45
22435	O	ARG	D	534	-112.604	-24.228	41.670	1.00	33.84
22436	N	LEU	D	535	-112.347	-23.869	39.459	1.00	32.92
22437	CA	LEU	D	535	-111.330	-24.873	39.276	1.00	32.75
22438	CB	LEU	D	535	-111.794	-25.967	38.330	1.00	33.22
22439	CG	LEU	D	535	-113.001	-26.703	38.907	1.00	34.43
22440	CD1	LEU	D	535	-113.453	-27.749	37.909	1.00	36.11
22441	CD2	LEU	D	535	-112.653	-27.322	40.271	1.00	32.76
22442	C	LEU	D	535	-110.201	-24.092	38.668	1.00	32.22
22443	O	LEU	D	535	-110.243	-23.712	37.493	1.00	30.98
22444	N	ASN	D	536	-109.206	-23.810	39.498	1.00	32.18
22445	CA	ASN	D	536	-108.085	-23.001	39.066	1.00	31.90
22446	CB	ASN	D	536	-108.384	-21.536	39.359	1.00	31.60
22447	CG	ASN	D	536	-108.677	-21.291	40.818	1.00	31.90
22448	OD1	ASN	D	536	-108.304	-22.105	41.678	1.00	31.63
22449	ND2	ASN	D	536	-109.340	-20.161	41.122	1.00	29.42
22450	C	ASN	D	536	-106.775	-23.425	39.704	1.00	31.71
22451	O	ASN	D	536	-106.671	-24.492	40.296	1.00	31.78
22452	N	TRP	D	537	-105.768	-22.577	39.566	1.00	31.71
22453	CA	TRP	D	537	-104.455	-22.868	40.092	1.00	31.28
22454	CB	TRP	D	537	-103.569	-21.655	39.873	1.00	30.97
22455	CG	TRP	D	537	-102.151	-21.917	40.133	1.00	28.42
22456	CD1	TRP	D	537	-101.437	-23.003	39.750	1.00	26.24
22457	NE1	TRP	D	537	-100.129	-22.874	40.147	1.00	26.79
22458	CE2	TRP	D	537	-99.987	-21.686	40.814	1.00	26.24
22459	CD2	TRP	D	537	-101.244	-21.054	40.813	1.00	28.24
22460	CE3	TRP	D	537	-101.368	-19.802	41.436	1.00	26.92
22461	C23	TRP	D	537	-100.275	-19.248	42.025	1.00	26.67
22462	CH2	TRP	D	537	-99.035	-19.898	42.002	1.00	28.13
22463	C22	TRP	D	537	-98.874	-21.117	41.396	1.00	27.01
22464	C	TRP	D	537	-104.551	-23.137	41.575	1.00	31.39
22465	O	TRP	D	537	-103.943	-24.065	42.098	1.00	32.11
22466	N	ALA	D	538	-105.315	-22.298	42.255	1.00	31.48
22467	CA	ALA	D	538	-105.494	-22.417	43.683	1.00	31.67
22468	CB	ALA	D	538	-106.381	-21.287	44.196	1.00	31.61
22469	C	ALA	D	538	-106.073	-23.783	44.057	1.00	31.89
22470	O	ALA	D	538	-105.707	-24.346	45.077	1.00	32.15
22471	N	THR	D	539	-106.983	-24.306	43.241	1.00	32.44
22472	CA	THR	D	539	-107.528	-25.635	43.487	1.00	33.01
22473	CB	THR	D	539	-108.526	-26.049	42.393	1.00	32.91
22474	OG1	THR	D	539	-109.510	-25.030	42.220	1.00	32.56
22475	CG2	THR	D	539	-109.365	-27.234	42.861	1.00	33.33
22476	C	THR	D	539	-106.371	-26.625	43.536	1.00	33.42
22477	O	THR	D	539	-106.253	-27.407	44.467	1.00	33.41
22478	N	TYR	D	540	-105.504	-26.569	42.533	1.00	33.82
22479	CA	TYR	D	540	-104.343	-27.452	42.482	1.00	34.43
22480	CB	TYR	D	540	-103.574	-27.267	41.166	1.00	34.19
22481	CG	TYR	D	540	-102.083	-27.408	41.334	1.00	35.99

FIGURE 3 PY

A	B	C	D	E	F	G	H	I	J
22482	CD1	TYR	D	540	-101.239	-26.291	41.266	1.00	36.53
22483	CE1	TYR	D	540	-99.870	-26.416	41.430	1.00	36.80
22484	CZ	TYR	D	540	-99.321	-27.666	41.678	1.00	39.13
22485	OH	TYR	D	540	-97.947	-27.817	41.841	1.00	39.63
22486	CE2	TYR	D	540	-100.144	-28.783	41.756	1.00	38.20
22487	CD2	TYR	D	540	-101.512	-28.647	41.583	1.00	36.76
22488	C	TYR	D	540	-103.403	-27.263	43.674	1.00	34.61
22489	O	TYR	D	540	-102.846	-28.227	44.187	1.00	35.20
22490	N	LEU	D	541	-103.220	-26.030	44.125	1.00	34.49
22491	CA	LEU	D	541	-102.306	-25.801	45.246	1.00	34.30
22492	CB	LEU	D	541	-101.986	-24.305	45.422	1.00	33.43
22493	CG	LEU	D	541	-101.287	-23.566	44.280	1.00	33.62
22494	CD1	LEU	D	541	-101.321	-22.060	44.528	1.00	33.14
22495	CD2	LEU	D	541	-99.857	-24.053	44.067	1.00	30.95
22496	C	LEU	D	541	-102.816	-26.372	46.568	1.00	34.23
22497	O	LEU	D	541	-102.043	-26.919	47.365	1.00	34.14
22498	N	ALA	D	542	-104.107	-26.211	46.820	1.00	34.20
22499	CA	ALA	D	542	-104.689	-26.682	48.067	1.00	34.60
22500	CB	ALA	D	542	-106.072	-26.089	48.250	1.00	34.08
22501	C	ALA	D	542	-104.774	-28.210	48.081	1.00	35.01
22502	O	ALA	D	542	-104.430	-28.873	49.069	1.00	34.56
22503	N	SER	D	543	-105.207	-28.740	46.945	1.00	35.36
22504	CA	SER	D	543	-105.488	-30.145	46.784	1.00	36.01
22505	CB	SER	D	543	-106.223	-30.344	45.461	1.00	36.05
22506	OG	SER	D	543	-106.513	-31.706	45.239	1.00	38.51
22507	C	SER	D	543	-104.241	-30.982	46.806	1.00	36.06
22508	O	SER	D	543	-104.138	-31.932	47.576	1.00	35.64
22509	N	THR	D	582	-103.278	-30.613	45.964	1.00	36.46
22510	CA	THR	D	544	-102.064	-31.412	45.797	1.00	36.40
22511	CB	THR	D	544	-101.614	-31.355	44.335	1.00	36.34
22512	OG1	THR	D	544	-102.676	-31.788	43.484	1.00	37.72
22513	CG2	THR	D	544	-100.522	-32.366	44.053	1.00	37.38
22514	C	THR	D	544	-100.911	-30.964	46.683	1.00	36.54
22515	O	THR	D	544	-100.186	-31.800	47.239	1.00	36.92
22516	N	GLU	D	545	-100.729	-29.649	46.816	1.00	35.81
22517	CA	GLU	D	545	-99.558	-29.141	47.515	1.00	35.27
22518	CB	GLU	D	545	-98.870	-28.052	46.674	1.00	34.96
22519	CG	GLU	D	545	-98.775	-28.409	45.193	1.00	34.43
22520	CD	GLU	D	545	-97.587	-29.292	44.853	1.00	33.89
22521	OB1	GLU	D	545	-97.339	-29.558	43.650	1.00	32.37
22522	OB2	GLU	D	545	-96.881	-29.715	45.787	1.00	35.41
22523	C	GLU	D	545	-99.892	-28.671	48.921	1.00	34.78
22524	O	GLU	D	545	-99.077	-28.076	49.611	1.00	35.19
22525	N	ASN	D	546	-101.101	-28.971	49.347	1.00	34.51
22526	CA	ASN	D	546	-101.558	-28.603	50.678	1.00	34.11
22527	CB	ASN	D	546	-101.163	-29.679	51.695	1.00	34.57
22528	CG	ASN	D	546	-101.851	-31.001	51.413	1.00	36.54
22529	OD1	ASN	D	546	-101.307	-31.860	50.719	1.00	40.92
22530	ND2	ASN	D	546	-103.064	-31.159	51.920	1.00	38.06
22531	C	ASN	D	546	-101.198	-27.195	51.136	1.00	33.35
22532	O	ASN	D	546	-100.691	-26.979	52.240	1.00	33.38

FIGURE 3 PZ

A	B	C	D	E	F	G	H	I	J
22533	N	ILE	D	547	-101.497	-26.236	50.269	1.00	32.27
22534	CA	ILE	D	547	-101.311	-24.827	50.545	1.00	30.72
22535	CB	ILE	D	547	-100.623	-24.155	49.330	1.00	31.08
22536	CG1	ILE	D	547	-99.209	-24.719	49.142	1.00	29.43
22537	CD1	ILE	D	547	-98.621	-24.443	47.817	1.00	24.93
22538	CG2	ILE	D	547	-100.610	-22.626	49.482	1.00	30.21
22539	C	ILE	D	547	-102.654	-24.157	50.779	1.00	30.22
22540	O	ILE	D	547	-103.548	-24.256	49.950	1.00	30.31
22541	N	ILE	D	548	-102.822	-23.489	51.913	1.00	29.75
22542	CA	ILE	D	548	-104.013	-22.695	52.083	1.00	29.56
22543	CB	ILE	D	548	-104.159	-22.187	53.502	1.00	29.32
22544	CG1	ILE	D	548	-104.299	-23.339	54.498	1.00	30.97
22545	CD1	ILE	D	548	-104.571	-22.855	55.948	1.00	28.15
22546	CG2	ILE	D	548	-105.390	-21.294	53.614	1.00	28.75
22547	C	ILE	D	548	-103.874	-21.491	51.156	1.00	29.79
22548	O	ILE	D	548	-102.842	-20.840	51.140	1.00	29.92
22549	N	VAL	D	549	-104.887	-21.195	50.360	1.00	29.75
22550	CA	VAL	D	549	-104.787	-19.987	49.572	1.00	29.97
22551	CB	VAL	D	549	-104.492	-20.228	48.067	1.00	29.86
22552	CG1	VAL	D	549	-104.788	-21.627	47.679	1.00	31.52
22553	CG2	VAL	D	549	-105.192	-19.204	47.198	1.00	30.60
22554	C	VAL	D	549	-105.961	-19.073	49.867	1.00	29.65
22555	O	VAL	D	549	-107.125	-19.410	49.628	1.00	29.74
22556	N	ALA	D	550	-105.619	-17.925	50.439	1.00	28.34
22557	CA	ALA	D	550	-106.589	-16.984	50.927	1.00	27.71
22558	CB	ALA	D	550	-106.215	-16.562	52.346	1.00	27.73
22559	C	ALA	D	550	-106.675	-15.750	50.054	1.00	27.36
22560	O	ALA	D	550	-105.756	-15.418	49.324	1.00	26.91
22561	N	SER	D	551	-107.790	-15.053	50.172	1.00	27.51
22562	CA	SER	D	551	-107.961	-13.810	49.461	1.00	28.01
22563	CB	SER	D	551	-108.754	-14.007	48.189	1.00	27.25
22564	OG	SER	D	551	-107.986	-14.798	47.310	1.00	28.09
22565	C	SER	D	551	-108.707	-13.001	50.433	1.00	27.68
22566	O	SER	D	551	-109.465	-13.565	51.223	1.00	28.39
22567	N	PHE	D	552	-108.489	-11.691	50.382	1.00	26.99
22568	CA	PHE	D	552	-109.076	-10.779	51.336	1.00	26.50
22569	CB	PHE	D	552	-108.028	-10.455	52.408	1.00	26.23
22570	CG	PHE	D	552	-108.509	-9.514	53.464	1.00	26.10
22571	CD1	PHE	D	552	-109.320	-9.962	54.495	1.00	26.43
22572	CE1	PHE	D	552	-109.764	-9.081	55.477	1.00	26.53
22573	CZ	PHE	D	552	-109.404	-7.758	55.425	1.00	25.63
22574	CE2	PHE	D	552	-108.595	-7.310	54.418	1.00	25.99
22575	CD2	PHE	D	552	-108.145	-8.190	53.439	1.00	25.54
22576	C	PHE	D	552	-109.546	-9.506	50.650	1.00	26.56
22577	O	PHE	D	552	-108.831	-8.934	49.849	1.00	26.45
22578	N	ASP	D	553	-110.764	-9.073	50.967	1.00	26.84
22579	CA	ASP	D	553	-111.307	-7.826	50.451	1.00	25.94
22580	CB	ASP	D	553	-112.769	-7.996	50.036	1.00	25.66
22581	CG	ASP	D	553	-112.948	-8.942	48.858	1.00	25.92
22582	OD1	ASP	D	553	-112.023	-9.073	48.032	1.00	22.66
22583	OD2	ASP	D	553	-113.995	-9.605	48.682	1.00	27.52

FIGURE 3 QA

A	B	C	D	E	F	G	H	I	J
22584	C	ASP	D	553	-111.244	-6.789	51.553	1.00	26.12
22585	O	ASP	D	553	-112.113	-6.762	52.432	1.00	26.68
22586	N	GLY	D	554	-110.234	-5.928	51.516	1.00	25.48
22587	CA	GLY	D	554	-110.116	-4.893	52.521	1.00	25.03
22588	C	GLY	D	554	-110.654	-3.556	52.057	1.00	24.97
22589	O	GLY	D	554	-111.596	-3.502	51.273	1.00	25.10
22590	N	ARG	D	555	-110.063	-2.468	52.546	1.00	24.82
22591	CA	ARG	D	555	-110.487	-1.142	52.127	1.00	24.46
22592	CB	ARG	D	555	-109.787	-0.067	52.952	1.00	24.30
22593	CG	ARG	D	555	-110.429	0.147	54.341	1.00	24.14
22594	CD	ARG	D	555	-109.582	0.985	55.282	1.00	23.12
22595	NE	ARG	D	555	-108.311	0.342	55.614	1.00	22.67
22596	CZ	ARG	D	555	-107.446	0.851	56.473	1.00	23.02
22597	NH1	ARG	D	555	-107.718	2.010	57.046	1.00	22.64
22598	NH2	ARG	D	555	-106.318	0.212	56.764	1.00	22.47
22599	C	ARG	D	555	-110.262	-0.957	50.615	1.00	24.24
22600	O	ARG	D	555	-109.253	-1.424	50.068	1.00	23.62
22601	N	GLY	D	556	-111.209	-0.285	49.959	1.00	23.17
22602	CA	GLY	D	556	-111.192	-0.154	48.514	1.00	23.85
22603	C	GLY	D	556	-112.076	-1.209	47.838	1.00	24.14
22604	O	GLY	D	556	-112.551	-1.008	46.727	1.00	23.54
22605	N	SER	D	557	-112.309	-2.330	48.519	1.00	24.74
22606	CA	SER	D	557	-113.092	-3.431	47.949	1.00	25.59
22607	CB	SER	D	557	-112.978	-4.696	48.811	1.00	25.61
22608	OG	SER	D	557	-113.803	-4.610	49.962	1.00	27.57
22609	C	SER	D	557	-114.547	-3.020	47.697	1.00	25.30
22610	O	SER	D	557	-115.020	-2.030	48.250	1.00	25.68
22611	N	GLY	D	558	-115.246	-3.759	46.840	1.00	25.65
22612	CA	GLY	D	558	-116.579	-3.350	46.401	1.00	25.83
22613	C	GLY	D	558	-117.793	-3.985	47.056	1.00	26.02
22614	O	GLY	D	558	-117.668	-4.868	47.898	1.00	26.32
22615	N	TYR	D	559	-118.969	-3.502	46.673	1.00	26.34
22616	CA	TYR	D	559	-120.250	-4.099	47.058	1.00	27.19
22617	CB	TYR	D	559	-120.344	-5.531	46.482	1.00	27.45
22618	CG	TYR	D	559	-119.810	-5.588	45.074	1.00	27.95
22619	CD1	TYR	D	559	-118.562	-6.141	44.799	1.00	27.49
22620	CB1	TYR	D	559	-118.066	-6.172	43.501	1.00	27.94
22621	CZ	TYR	D	559	-118.813	-5.618	42.471	1.00	28.56
22622	OH	TYR	D	559	-118.323	-5.599	41.188	1.00	27.38
22623	CE2	TYR	D	559	-120.029	-5.035	42.731	1.00	28.45
22624	CD2	TYR	D	559	-120.514	-5.011	44.029	1.00	28.47
22625	C	TYR	D	559	-120.591	-4.091	48.549	1.00	27.37
22626	O	TYR	D	559	-121.465	-4.850	48.983	1.00	27.51
22627	N	GLN	D	560	-119.953	-3.204	49.311	1.00	27.31
22628	CA	GLN	D	560	-120.146	-3.101	50.759	1.00	27.23
22629	CB	GLN	D	560	-118.908	-3.625	51.489	1.00	27.77
22630	CG	GLN	D	560	-118.519	-5.043	51.134	1.00	28.91
22631	CD	GLN	D	560	-117.054	-5.331	51.357	1.00	31.26
22632	OE1	GLN	D	560	-116.624	-5.576	52.491	1.00	31.80
22633	NE2	GLN	D	560	-116.280	-5.344	50.268	1.00	30.98
22634	C	GLN	D	560	-120.366	-1.645	51.151	1.00	27.53



FIGURE 3 QB

A	B	C	D	E	F	G	H	I	J
22635	O	GLN	D	560	-120.236	-1.267	52.321	1.00	27.86
22636	N	GLY	D	561	-120.679	-0.817	50.161	1.00	27.89
22637	CA	GLY	D	561	-120.889	0.602	50.395	1.00	27.38
22638	C	GLY	D	561	-119.659	1.477	50.206	1.00	27.11
22639	O	GLY	D	561	-118.524	1.008	50.263	1.00	26.62
22640	N	ASP	D	562	-119.892	2.767	49.995	1.00	27.30
22641	CA	ASP	D	562	-118.812	3.709	49.753	1.00	28.31
22642	CB	ASP	D	562	-119.365	5.051	49.321	1.00	28.36
22643	CG	ASP	D	562	-120.046	4.988	47.983	1.00	29.39
22644	OD1	ASP	D	562	-119.845	3.988	47.236	1.00	30.55
22645	OD2	ASP	D	562	-120.815	5.894	47.610	1.00	29.84
22646	C	ASP	D	562	-117.812	3.926	50.880	1.00	28.85
22647	O	ASP	D	562	-116.637	4.191	50.616	1.00	29.41
22648	N	LYS	D	563	-118.249	3.850	52.127	1.00	29.56
22649	CA	LYS	D	563	-117.301	4.043	53.225	1.00	30.60
22650	CB	LYS	D	563	-117.917	3.696	54.573	1.00	31.11
22651	CG	LYS	D	563	-116.916	3.688	55.720	1.00	34.21
22652	CD	LYS	D	563	-116.706	5.123	56.259	1.00	41.16
22653	CE	LYS	D	563	-115.530	5.204	57.255	1.00	43.33
22654	NZ	LYS	D	563	-115.058	6.615	57.450	1.00	44.62
22655	C	LYS	D	563	-116.087	3.165	52.984	1.00	30.00
22656	O	LYS	D	563	-114.957	3.612	53.094	1.00	30.15
22657	N	ILE	D	564	-116.328	1.906	52.642	1.00	29.49
22658	CA	ILE	D	564	-115.235	0.996	52.373	1.00	28.53
22659	CB	ILE	D	564	-115.717	-0.469	52.546	1.00	29.28
22660	CG1	ILE	D	564	-115.851	-0.832	54.031	1.00	27.78
22661	CD1	ILE	D	564	-116.449	-2.225	54.258	1.00	26.22
22662	CG2	ILE	D	564	-114.757	-1.466	51.812	1.00	27.48
22663	C	ILE	D	564	-114.642	1.180	50.973	1.00	28.08
22664	O	ILE	D	564	-113.441	1.096	50.794	1.00	28.14
22665	N	MET	D	565	-115.471	1.426	49.971	1.00	27.98
22666	CA	MET	D	565	-114.939	1.458	48.603	1.00	27.61
22667	CB	MET	D	565	-116.057	1.360	47.561	1.00	27.73
22668	CG	MET	D	565	-115.550	1.349	46.129	1.00	26.07
22669	SD	MET	D	565	-116.862	1.094	44.933	1.00	27.30
22670	CE	MET	D	565	-117.601	2.652	44.824	1.00	25.23
22671	C	MET	D	565	-114.088	2.672	48.333	1.00	27.63
22672	O	MET	D	565	-113.015	2.559	47.745	1.00	27.09
22673	N	HIS	D	566	-114.578	3.830	48.773	1.00	27.52
22674	CA	HIS	D	566	-113.881	5.093	48.577	1.00	27.65
22675	CB	HIS	D	566	-114.865	6.269	48.626	1.00	27.68
22676	CG	HIS	D	566	-115.793	6.303	47.457	1.00	26.99
22677	ND1	HIS	D	566	-116.939	7.066	47.429	1.00	28.50
22678	CE1	HIS	D	566	-117.567	6.871	46.281	1.00	28.97
22679	NE2	HIS	D	566	-116.873	5.999	45.569	1.00	26.95
22680	CD2	HIS	D	566	-115.766	5.620	46.290	1.00	27.38
22681	C	HIS	D	566	-112.754	5.329	49.555	1.00	27.89
22682	O	HIS	D	566	-112.116	6.376	49.526	1.00	28.02
22683	N	ALA	D	567	-112.488	4.358	50.418	1.00	28.19
22684	CA	ALA	D	567	-111.425	4.533	51.401	1.00	28.18
22685	CB	ALA	D	567	-111.348	3.320	52.332	1.00	28.22

FIGURE 3 QC

A	B	C	D	E	F	G	H	I	J
22686	C	ALA	D	567	-110.071	4.789	50.740	1.00	28.08
22687	O	ALA	D	567	-109.205	5.449	51.328	1.00	27.85
22688	N	ILE	D	568	-109.874	4.259	49.528	1.00	27.58
22689	CA	ILE	D	568	-108.598	4.447	48.850	1.00	27.06
22690	CB	ILE	D	568	-108.082	3.124	48.203	1.00	27.60
22691	CG1	ILE	D	568	-109.113	2.479	47.291	1.00	26.85
22692	CD1	ILE	D	568	-109.901	3.443	46.432	1.00	29.00
22693	CG2	ILE	D	568	-107.640	2.107	49.293	1.00	28.00
22694	C	ILE	D	568	-108.593	5.594	47.844	1.00	27.07
22695	O	ILE	D	568	-107.677	5.697	47.015	1.00	26.67
22696	N	ASN	D	569	-109.608	6.456	47.920	1.00	26.74
22697	CA	ASN	D	569	-109.717	7.583	46.997	1.00	26.98
22698	CB	ASN	D	569	-110.934	8.450	47.337	1.00	26.81
22699	CG	ASN	D	569	-111.215	9.499	46.277	1.00	29.08
22700	OD1	ASN	D	569	-111.277	10.699	46.570	1.00	31.62
22701	ND2	ASN	D	569	-111.367	9.058	45.034	1.00	28.47
22702	C	ASN	D	569	-108.458	8.435	47.024	1.00	27.29
22703	O	ASN	D	569	-108.073	8.946	48.075	1.00	26.42
22704	N	ARG	D	570	-107.791	8.544	45.877	1.00	27.75
22705	CA	ARG	D	570	-106.620	9.405	45.760	1.00	28.44
22706	CB	ARG	D	570	-106.924	10.792	46.346	1.00	28.62
22707	CG	ARG	D	570	-107.950	11.571	45.559	1.00	30.72
22708	CD	ARG	D	570	-108.236	12.971	46.119	1.00	36.07
22709	NE	ARG	D	570	-107.033	13.789	46.249	1.00	38.04
22710	CZ	ARG	D	570	-106.550	14.551	45.282	1.00	39.15
22711	NH1	ARG	D	570	-107.167	14.596	44.108	1.00	39.37
22712	NH2	ARG	D	570	-105.448	15.267	45.483	1.00	40.48
22713	C	ARG	D	570	-105.439	8.805	46.473	1.00	28.36
22714	O	ARG	D	570	-104.361	9.397	46.559	1.00	27.76
22715	N	ARG	D	571	-105.618	7.595	46.964	1.00	28.89
22716	CA	ARG	D	571	-104.562	7.056	47.778	1.00	29.67
22717	CB	ARG	D	571	-104.861	7.341	49.256	1.00	29.49
22718	CG	ARG	D	571	-103.669	7.967	49.989	1.00	34.40
22719	CD	ARG	D	571	-103.706	9.481	50.211	1.00	37.34
22720	NE	ARG	D	571	-103.697	10.225	48.963	1.00	40.61
22721	CZ	ARG	D	571	-103.474	11.525	48.868	1.00	41.04
22722	NH1	ARG	D	571	-103.490	12.103	47.672	1.00	40.49
22723	NH2	ARG	D	571	-103.233	12.248	49.960	1.00	41.29
22724	C	ARG	D	571	-104.290	5.589	47.472	1.00	29.13
22725	O	ARG	D	571	-104.166	4.748	48.366	1.00	29.48
22726	N	LEU	D	572	-104.165	5.290	46.186	1.00	28.53
22727	CA	LEU	D	572	-103.865	3.918	45.770	1.00	28.13
22728	CB	LEU	D	572	-103.815	3.814	44.246	1.00	27.82
22729	CG	LEU	D	572	-105.077	3.332	43.525	1.00	28.58
22730	CD1	LEU	D	572	-105.174	3.831	42.088	1.00	25.84
22731	CD2	LEU	D	572	-106.344	3.628	44.310	1.00	28.27
22732	C	LEU	D	572	-102.534	3.495	46.372	1.00	27.64
22733	O	LEU	D	572	-101.662	4.323	46.605	1.00	28.39
22734	N	GLY	D	573	-102.379	2.210	46.640	1.00	26.99
22735	CA	GLY	D	573	-101.137	1.711	47.178	1.00	25.65
22736	C	GLY	D	573	-100.985	2.031	48.656	1.00	25.59

FIGURE 3 QD

A	B	C	D	E	F	G	H	I	J
22737	O	GLY	D	573	-99.872	2.088	49.158	1.00	25.01
22738	N	THR	D	574	-102.089	2.271	49.358	1.00	25.02
22739	CA	THR	D	574	-101.978	2.512	50.798	1.00	24.80
22740	CB	THR	D	574	-102.403	3.932	51.175	1.00	24.60
22741	OG1	THR	D	574	-103.769	4.133	50.788	1.00	25.11
22742	CG2	THR	D	574	-101.624	4.977	50.361	1.00	24.02
22743	C	THR	D	574	-102.786	1.507	51.618	1.00	24.68
22744	O	THR	D	574	-102.291	0.453	51.957	1.00	23.86
22745	N	PHE	D	575	-104.039	1.843	51.913	1.00	25.42
22746	CA	PHE	D	575	-104.884	1.037	52.786	1.00	26.24
22747	CB	PHE	D	575	-106.212	1.749	53.005	1.00	26.92
22748	CG	PHE	D	575	-106.088	3.074	53.724	1.00	28.29
22749	CD1	PHE	D	575	-105.145	3.260	54.707	1.00	28.72
22750	CE1	PHE	D	575	-105.050	4.475	55.390	1.00	30.07
22751	CZ	PHE	D	575	-105.896	5.510	55.090	1.00	29.21
22752	CE2	PHE	D	575	-106.848	5.335	54.106	1.00	31.74
22753	CD2	PHE	D	575	-106.949	4.113	53.435	1.00	29.53
22754	C	PHE	D	575	-105.167	-0.374	52.291	1.00	26.80
22755	O	PHE	D	575	-105.347	-1.297	53.094	1.00	27.14
22756	N	GLU	D	576	-105.226	-0.541	50.973	1.00	26.67
22757	CA	GLU	D	576	-105.526	-1.825	50.386	1.00	26.70
22758	CB	GLU	D	576	-106.059	-1.656	48.953	1.00	27.22
22759	CG	GLU	D	576	-104.999	-1.536	47.850	1.00	28.25
22760	CD	GLU	D	576	-104.397	-0.138	47.693	1.00	29.97
22761	OE1	GLU	D	576	-104.224	0.603	48.695	1.00	29.55
22762	OE2	GLU	D	576	-104.064	0.213	46.544	1.00	31.10
22763	C	GLU	D	576	-104.284	-2.701	50.463	1.00	27.03
22764	O	GLU	D	576	-104.381	-3.921	50.618	1.00	27.54
22765	N	VAL	D	577	-103.113	-2.082	50.372	1.00	27.44
22766	CA	VAL	D	577	-101.849	-2.797	50.534	1.00	27.86
22767	CB	VAL	D	577	-100.634	-1.902	50.144	1.00	28.09
22768	CG1	VAL	D	577	-100.673	-1.570	48.673	1.00	27.66
22769	CG2	VAL	D	577	-99.293	-2.566	50.504	1.00	26.74
22770	C	VAL	D	577	-101.729	-3.218	52.006	1.00	28.75
22771	O	VAL	D	577	-101.523	-4.386	52.314	1.00	27.76
22772	N	GLU	D	578	-101.889	-2.244	52.900	1.00	29.84
22773	CA	GLU	D	578	-101.814	-2.454	54.348	1.00	31.68
22774	CB	GLU	D	578	-102.010	-1.110	55.089	1.00	32.26
22775	CG	GLU	D	578	-100.801	-0.173	54.957	1.00	37.82
22776	CD	GLU	D	578	-101.117	1.320	55.116	1.00	45.04
22777	OE1	GLU	D	578	-100.809	2.100	54.163	1.00	47.10
22778	OE2	GLU	D	578	-101.632	1.736	56.196	1.00	46.15
22779	C	GLU	D	578	-102.811	-3.519	54.825	1.00	31.53
22780	O	GLU	D	578	-102.450	-4.412	55.596	1.00	31.88
22781	N	ASP	D	579	-104.052	-3.450	54.345	1.00	31.09
22782	CA	ASP	D	579	-105.054	-4.420	54.764	1.00	30.71
22783	CB	ASP	D	579	-106.443	-4.034	54.266	1.00	31.02
22784	CG	ASP	D	579	-107.014	-2.810	54.984	1.00	32.48
22785	OD1	ASP	D	579	-106.396	-2.324	55.962	1.00	33.16
22786	OD2	ASP	D	579	-108.090	-2.261	54.632	1.00	33.82
22787	C	ASP	D	579	-104.679	-5.863	54.361	1.00	30.02

FIGURE 3 QE

A	B	C	D	E	F	G	H	I	J
22788	O	ASP	D	579	-104.980	-6.809	55.085	1.00	29.35
22789	N	GLN	D	580	-104.007	-6.037	53.229	1.00	29.15
22790	CA	GLN	D	580	-103.561	-7.375	52.844	1.00	28.97
22791	CB	GLN	D	580	-102.978	-7.394	51.428	1.00	28.42
22792	CG	GLN	D	580	-103.972	-7.130	50.322	1.00	27.58
22793	CD	GLN	D	580	-104.992	-8.242	50.155	1.00	27.11
22794	OE1	GLN	D	580	-104.625	-9.400	50.001	1.00	25.81
22795	NE2	GLN	D	580	-106.280	-7.883	50.161	1.00	25.38
22796	C	GLN	D	580	-102.512	-7.896	53.828	1.00	29.53
22797	O	GLN	D	580	-102.454	-9.095	54.117	1.00	29.69
22798	N	ILE	D	581	-101.661	-7.002	54.321	1.00	29.77
22799	CA	ILE	D	581	-100.649	-7.403	55.272	1.00	30.78
22800	CB	ILE	D	581	-99.610	-6.280	55.453	1.00	30.83
22801	CG1	ILE	D	581	-98.635	-6.234	54.267	1.00	30.50
22802	CD1	ILE	D	581	-98.115	-4.801	54.003	1.00	29.32
22803	CG2	ILE	D	581	-98.837	-6.434	56.772	1.00	30.88
22804	C	ILE	D	581	-101.318	-7.778	56.599	1.00	31.22
22805	O	ILE	D	581	-101.019	-8.815	57.185	1.00	31.08
22806	N	GLU	D	582	-102.229	-6.925	57.052	1.00	31.70
22807	CA	GLU	D	582	-102.977	-7.160	58.286	1.00	32.63
22808	CB	GLU	D	582	-103.890	-5.968	58.609	1.00	32.27
22809	CG	GLU	D	582	-104.750	-6.176	59.838	1.00	33.99
22810	CD	GLU	D	582	-103.925	-6.299	61.114	1.00	38.62
22811	OE1	GLU	D	582	-104.472	-6.791	62.124	1.00	38.76
22812	OE2	GLU	D	582	-102.734	-5.891	61.114	1.00	40.20
22813	C	GLU	D	582	-103.801	-8.444	58.194	1.00	32.47
22814	O	GLU	D	582	-103.972	-9.158	59.183	1.00	33.17
22815	N	ALA	D	583	-104.292	-8.740	57.002	1.00	32.20
22816	CA	ALA	D	583	-105.040	-9.974	56.783	1.00	32.77
22817	CB	ALA	D	583	-105.639	-10.020	55.371	1.00	32.21
22818	C	ALA	D	583	-104.140	-11.171	57.008	1.00	32.51
22819	O	ALA	D	583	-104.515	-12.108	57.702	1.00	32.29
22820	N	ALA	D	584	-102.961	-11.134	56.399	1.00	32.95
22821	CA	ALA	D	584	-101.987	-12.207	56.561	1.00	34.06
22822	CB	ALA	D	584	-100.776	-11.936	55.745	1.00	33.46
22823	C	ALA	D	584	-101.625	-12.358	58.038	1.00	35.08
22824	O	ALA	D	584	-101.484	-13.473	58.540	1.00	35.25
22825	N	ARG	D	585	-101.504	-11.231	58.729	1.00	36.40
22826	CA	ARG	D	585	-101.232	-11.240	60.155	1.00	38.09
22827	CB	ARG	D	585	-101.007	-9.819	60.693	1.00	38.45
22828	CG	ARG	D	585	-99.588	-9.293	60.510	1.00	37.61
22829	CD	ARG	D	585	-99.263	-8.106	61.400	1.00	38.68
22830	NE	ARG	D	585	-98.920	-6.886	60.672	1.00	40.40
22831	CZ	ARG	D	585	-97.673	-6.482	60.453	1.00	40.67
22832	NH1	ARG	D	585	-96.654	-7.202	60.898	1.00	41.73
22833	NH2	ARG	D	585	-97.438	-5.360	59.799	1.00	39.47
22834	C	ARG	D	585	-102.342	-11.921	60.942	1.00	39.12
22835	O	ARG	D	585	-102.058	-12.724	61.816	1.00	39.64
22836	N	GLN	D	586	-103.599	-11.622	60.630	1.00	40.11
22837	CA	GLN	D	586	-104.709	-12.224	61.360	1.00	41.16
22838	CB	GLN	D	586	-106.025	-11.492	61.091	1.00	41.10

FIGURE 3 QF

A	B	C	D	E	F	G	H	I	J
22839	CG	GLN	D	586	-106.123	-10.079	61.682	1.00	42.90
22840	CD	GLN	D	586	-106.715	-10.060	63.075	1.00	45.95
22841	OE1	GLN	D	586	-107.124	-9.015	63.566	1.00	47.36
22842	NE2	GLN	D	586	-106.773	-11.226	63.711	1.00	48.11
22843	C	GLN	D	586	-104.861	-13.705	61.031	1.00	41.99
22844	O	GLN	D	586	-105.377	-14.474	61.847	1.00	42.30
22845	N	PHE	D	587	-104.427	-14.101	59.836	1.00	42.89
22846	CA	PHE	D	587	-104.498	-15.503	59.426	1.00	43.33
22847	CB	PHE	D	587	-104.241	-15.677	57.921	1.00	42.71
22848	CG	PHE	D	587	-105.281	-15.049	57.037	1.00	41.34
22849	CD1	PHE	D	587	-106.572	-14.834	57.493	1.00	40.20
22850	CE1	PHE	D	587	-107.521	-14.254	56.671	1.00	38.14
22851	CZ	PHE	D	587	-107.187	-13.895	55.376	1.00	37.46
22852	CE2	PHE	D	587	-105.919	-14.116	54.912	1.00	36.54
22853	CD2	PHE	D	587	-104.971	-14.685	55.735	1.00	38.81
22854	C	PHE	D	587	-103.440	-16.252	60.226	1.00	44.39
22855	O	PHE	D	587	-103.657	-17.389	60.638	1.00	44.74
22856	N	SER	D	588	-102.292	-15.606	60.430	1.00	45.69
22857	CA	SER	D	588	-101.217	-16.161	61.258	1.00	47.02
22858	CB	SER	D	588	-100.030	-15.195	61.361	1.00	47.26
22859	OG	SER	D	588	-99.056	-15.433	60.351	1.00	48.72
22860	C	SER	D	588	-101.720	-16.455	62.663	1.00	47.44
22861	O	SER	D	588	-101.435	-17.517	63.217	1.00	47.74
22862	N	LYS	D	589	-102.472	-15.524	63.238	1.00	47.68
22863	CA	LYS	D	589	-102.988	-15.726	64.586	1.00	48.75
22864	CB	LYS	D	589	-103.438	-14.397	65.214	1.00	48.90
22865	CG	LYS	D	589	-102.318	-13.665	65.968	1.00	51.80
22866	CD	LYS	D	589	-101.415	-12.829	65.027	1.00	56.24
22867	CE	LYS	D	589	-100.144	-12.316	65.741	1.00	58.28
22868	NZ	LYS	D	589	-99.516	-11.165	65.007	1.00	60.63
22869	C	LYS	D	589	-104.093	-16.788	64.665	1.00	48.47
22870	O	LYS	D	589	-104.526	-17.158	65.759	1.00	49.01
22871	N	MET	D	590	-104.539	-17.283	63.515	1.00	47.95
22872	CA	MET	D	590	-105.591	-18.293	63.503	1.00	47.45
22873	CB	MET	D	590	-106.346	-18.303	62.171	1.00	47.08
22874	CG	MET	D	590	-107.438	-17.267	62.106	1.00	46.07
22875	SD	MET	D	590	-108.073	-17.158	60.449	1.00	44.94
22876	CE	MET	D	590	-109.348	-15.990	60.659	1.00	45.88
22877	C	MET	D	590	-105.095	-19.711	63.865	1.00	47.12
22878	O	MET	D	590	-105.898	-20.636	64.054	1.00	47.49
22879	N	GLY	D	591	-103.776	-19.890	63.940	1.00	46.11
22880	CA	GLY	D	591	-103.200	-21.150	64.388	1.00	44.74
22881	C	GLY	D	591	-102.758	-22.185	63.369	1.00	44.10
22882	O	GLY	D	591	-101.780	-22.897	63.599	1.00	44.53
22883	N	PHE	D	592	-103.471	-22.294	62.254	1.00	42.57
22884	CA	PHE	D	592	-103.126	-23.294	61.258	1.00	40.76
22885	CB	PHE	D	592	-104.397	-23.899	60.674	1.00	41.08
22886	CG	PHE	D	592	-105.425	-22.884	60.306	1.00	40.63
22887	CD1	PHE	D	592	-106.558	-22.719	61.075	1.00	41.45
22888	CE1	PHE	D	592	-107.511	-21.772	60.727	1.00	40.92
22889	CZ	PHE	D	592	-107.322	-20.993	59.602	1.00	39.45

FIGURE 3 QG

A	B	C	D	E	F	G	H	I	J
22890	CE2	PHE	D	592	-106.197	-21.156	58.839	1.00	38.64
22891	CD2	PHE	D	592	-105.257	-22.087	59.188	1.00	39.90
22892	C	PHE	D	592	-102.241	-22.752	60.135	1.00	39.98
22893	O	PHE	D	592	-102.193	-23.327	59.035	1.00	39.38
22894	N	VAL	D	593	-101.536	-21.658	60.409	1.00	38.64
22895	CA	VAL	D	593	-100.630	-21.083	59.411	1.00	37.58
22896	CB	VAL	D	593	-101.005	-19.628	59.041	1.00	37.59
22897	CG1	VAL	D	593	-99.801	-18.892	58.427	1.00	36.42
22898	CG2	VAL	D	593	-102.186	-19.618	58.087	1.00	36.64
22899	C	VAL	D	593	-99.170	-21.140	59.809	1.00	37.12
22900	O	VAL	D	593	-98.782	-20.674	60.884	1.00	37.47
22901	N	ASP	D	594	-98.353	-21.720	58.943	1.00	36.52
22902	CA	ASP	D	594	-96.923	-21.728	59.187	1.00	36.38
22903	CB	ASP	D	594	-96.230	-22.810	58.354	1.00	35.77
22904	CG	ASP	D	594	-94.731	-22.758	58.494	1.00	35.39
22905	OD1	ASP	D	594	-94.008	-23.515	57.802	1.00	35.89
22906	OD2	ASP	D	594	-94.181	-21.980	59.292	1.00	34.16
22907	C	ASP	D	594	-96.374	-20.345	58.830	1.00	36.57
22908	O	ASP	D	594	-96.181	-20.044	57.650	1.00	37.17
22909	N	ASN	D	595	-96.160	-19.507	59.840	1.00	36.30
22910	CA	ASN	D	595	-95.634	-18.148	59.656	1.00	36.78
22911	CB	ASN	D	595	-95.377	-17.491	61.018	1.00	37.54
22912	CG	ASN	D	595	-96.649	-17.078	61.699	1.00	41.48
22913	OD1	ASN	D	595	-97.746	-17.471	61.280	1.00	45.39
22914	ND2	ASN	D	595	-96.526	-16.287	62.760	1.00	43.93
22915	C	ASN	D	595	-94.352	-18.036	58.835	1.00	35.85
22916	O	ASN	D	595	-93.994	-16.953	58.370	1.00	35.40
22917	N	LYS	D	596	-93.648	-19.143	58.675	1.00	34.72
22918	CA	LYS	D	596	-92.413	-19.119	57.920	1.00	34.21
22919	CB	LYS	D	596	-91.435	-20.128	58.507	1.00	34.17
22920	CG	LYS	D	596	-91.250	-19.909	60.041	1.00	36.54
22921	CD	LYS	D	596	-90.150	-20.773	60.662	1.00	37.81
22922	CE	LYS	D	596	-90.308	-22.227	60.276	1.00	40.13
22923	NZ	LYS	D	596	-91.635	-22.778	60.686	1.00	41.92
22924	C	LYS	D	596	-92.651	-19.320	56.417	1.00	33.28
22925	O	LYS	D	596	-91.740	-19.205	55.602	1.00	33.31
22926	N	ARG	D	597	-93.889	-19.597	56.049	1.00	32.32
22927	CA	ARG	D	597	-94.202	-19.812	54.644	1.00	31.94
22928	CB	ARG	D	597	-94.289	-21.301	54.364	1.00	32.07
22929	CG	ARG	D	597	-92.965	-21.992	54.619	1.00	34.21
22930	CD	ARG	D	597	-92.971	-23.463	54.314	1.00	34.83
22931	NE	ARG	D	597	-93.720	-24.207	55.309	1.00	36.28
22932	CZ	ARG	D	597	-94.198	-25.416	55.095	1.00	38.14
22933	NH1	ARG	D	597	-94.010	-25.999	53.911	1.00	38.90
22934	NH2	ARG	D	597	-94.860	-26.040	56.049	1.00	37.79
22935	C	ARG	D	597	-95.474	-19.093	54.193	1.00	30.69
22936	O	ARG	D	597	-96.473	-19.730	53.857	1.00	30.79
22937	N	ILE	D	598	-95.442	-17.768	54.225	1.00	29.08
22938	CA	ILE	D	598	-96.571	-16.980	53.737	1.00	27.73
22939	CB	ILE	D	598	-97.092	-15.999	54.803	1.00	27.92
22940	CG1	ILE	D	598	-97.392	-16.759	56.110	1.00	26.82

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 QH**

A	B	C	D	E	F	G	H	I	J
22941	CD1	ILE	D	598	-97.873	-15.890	57.219	1.00	25.20
22942	CG2	ILE	D	598	-98.342	-15.300	54.329	1.00	25.89
22943	C	ILE	D	598	-96.084	-16.276	52.488	1.00	27.30
22944	O	ILE	D	598	-95.021	-15.649	52.471	1.00	26.65
22945	N	ALA	D	599	-96.846	-16.448	51.419	1.00	26.51
22946	CA	ALA	D	599	-96.491	-15.902	50.144	1.00	25.08
22947	CB	ALA	D	599	-96.186	-17.014	49.175	1.00	25.13
22948	C	ALA	D	599	-97.655	-15.086	49.669	1.00	25.14
22949	O	ALA	D	599	-98.724	-15.064	50.295	1.00	24.14
22950	N	ILE	D	600	-97.444	-14.383	48.563	1.00	24.78
22951	CA	ILE	D	600	-98.485	-13.536	48.032	1.00	23.69
22952	CB	ILE	D	600	-98.459	-12.153	48.722	1.00	24.06
22953	CG1	ILE	D	600	-99.587	-11.273	48.193	1.00	23.71
22954	CD1	ILE	D	600	-99.725	-9.971	48.917	1.00	21.11
22955	CG2	ILE	D	600	-97.081	-11.463	48.559	1.00	22.54
22956	C	ILE	D	600	-98.274	-13.440	46.548	1.00	23.68
22957	O	ILE	D	600	-97.149	-13.503	46.049	1.00	23.70
22958	N	TRP	D	601	-99.369	-13.334	45.818	1.00	23.86
22959	CA	TRP	D	601	-99.271	-13.281	44.376	1.00	22.92
22960	CB	TRP	D	601	-99.091	-14.680	43.784	1.00	22.51
22961	CG	TRP	D	601	-100.342	-15.316	43.245	1.00	22.42
22962	CD1	TRP	D	601	-101.266	-15.997	43.949	1.00	21.34
22963	NE1	TRP	D	601	-102.258	-16.458	43.121	1.00	22.82
22964	CE2	TRP	D	601	-101.970	-16.092	41.834	1.00	23.85
22965	CD2	TRP	D	601	-100.767	-15.365	41.874	1.00	23.54
22966	CE3	TRP	D	601	-100.250	-14.863	40.673	1.00	23.20
22967	CZ3	TRP	D	601	-100.937	-15.104	39.498	1.00	24.27
22968	CH2	TRP	D	601	-102.146	-15.832	39.492	1.00	23.52
22969	CZ2	TRP	D	601	-102.674	-16.331	40.646	1.00	22.15
22970	C	TRP	D	601	-100.514	-12.627	43.843	1.00	22.66
22971	O	TRP	D	601	-101.545	-12.651	44.493	1.00	22.09
22972	N	GLY	D	602	-100.389	-12.044	42.656	1.00	22.24
22973	CA	GLY	D	602	-101.468	-11.332	42.015	1.00	21.84
22974	C	GLY	D	602	-101.087	-10.926	40.603	1.00	21.79
22975	O	GLY	D	602	-99.926	-11.006	40.198	1.00	22.06
22976	N	TRP	D	603	-102.071	-10.438	39.872	1.00	22.68
22977	CA	TRP	D	603	-101.951	-10.131	38.455	1.00	23.29
22978	CB	TRP	D	603	-102.806	-11.160	37.719	1.00	23.27
22979	CG	TRP	D	603	-102.592	-11.304	36.278	1.00	25.73
22980	CD1	TRP	D	603	-102.670	-10.327	35.335	1.00	27.22
22981	NE1	TRP	D	603	-102.409	-10.852	34.090	1.00	28.83
22982	CE2	TRP	D	603	-102.166	-12.196	34.209	1.00	28.70
22983	CD2	TRP	D	603	-102.284	-12.520	35.574	1.00	28.46
22984	CE3	TRP	D	603	-102.069	-13.852	35.967	1.00	29.49
22985	CZ3	TRP	D	603	-101.772	-14.801	34.994	1.00	29.73
22986	CH2	TRP	D	603	-101.676	-14.442	33.640	1.00	28.93
22987	CZ2	TRP	D	603	-101.877	-13.150	33.232	1.00	28.88
22988	C	TRP	D	603	-102.542	-8.750	38.254	1.00	23.40
22989	O	TRP	D	603	-103.594	-8.463	38.792	1.00	23.07
22990	N	SER	D	604	-101.873	-7.886	37.494	1.00	24.27
22991	CA	SER	D	604	-102.407	-6.535	37.222	1.00	24.66

FIGURE 3 QI

A	B	C	D	E	F	G	H	I	J
22992	CB	SER	D	604	-103.789	-6.615	36.568	1.00	24.77
22993	OG	SER	D	604	-104.070	-5.413	35.859	1.00	26.90
22994	C	SER	D	604	-102.422	-5.670	38.486	1.00	23.41
22995	O	SER	D	604	-101.372	-5.445	39.058	1.00	23.95
22996	N	TYR	D	605	-103.579	-5.193	38.931	1.00	23.03
22997	CA	TYR	D	605	-103.631	-4.467	40.203	1.00	22.68
22998	CB	TYR	D	605	-105.054	-4.018	40.581	1.00	22.87
22999	CG	TYR	D	605	-105.036	-2.841	41.583	1.00	24.08
23000	CD1	TYR	D	605	-105.355	-1.549	41.178	1.00	21.68
23001	CE1	TYR	D	605	-105.338	-0.482	42.061	1.00	21.13
23002	CZ	TYR	D	605	-104.977	-0.696	43.366	1.00	23.44
23003	OH	TYR	D	605	-104.941	0.359	44.218	1.00	23.36
23004	CE2	TYR	D	605	-104.645	-1.964	43.817	1.00	24.51
23005	CD2	TYR	D	605	-104.660	-3.032	42.921	1.00	24.94
23006	C	TYR	D	605	-103.053	-5.407	41.267	1.00	22.70
23007	O	TYR	D	605	-102.310	-4.995	42.169	1.00	22.81
23008	N	GLY	D	606	-103.356	-6.687	41.112	1.00	21.85
23009	CA	GLY	D	606	-102.812	-7.697	41.981	1.00	21.79
23010	C	GLY	D	606	-101.293	-7.751	41.985	1.00	21.22
23011	O	GLY	D	606	-100.695	-8.008	43.023	1.00	20.85
23012	N	GLY	D	607	-100.662	-7.548	40.835	1.00	20.80
23013	CA	GLY	D	607	-99.208	-7.534	40.794	1.00	20.33
23014	C	GLY	D	607	-98.629	-6.308	41.505	1.00	21.15
23015	O	GLY	D	607	-97.564	-6.384	42.123	1.00	21.69
23016	N	TYR	D	608	-99.325	-5.172	41.394	1.00	21.32
23017	CA	TYR	D	608	-98.955	-3.955	42.075	1.00	21.05
23018	CB	TYR	D	608	-99.920	-2.870	41.644	1.00	21.75
23019	CG	TYR	D	608	-99.789	-1.561	42.412	1.00	19.88
23020	CD1	TYR	D	608	-100.839	-1.076	43.171	1.00	18.29
23021	CE1	TYR	D	608	-100.738	0.144	43.831	1.00	19.02
23022	CZ	TYR	D	608	-99.576	0.867	43.738	1.00	18.01
23023	OH	TYR	D	608	-99.460	2.076	44.406	1.00	19.81
23024	CE2	TYR	D	608	-98.518	0.382	42.994	1.00	16.72
23025	CD2	TYR	D	608	-98.639	-0.802	42.326	1.00	16.68
23026	C	TYR	D	608	-99.033	-4.139	43.592	1.00	21.56
23027	O	TYR	D	608	-98.074	-3.875	44.301	1.00	21.04
23028	N	VAL	D	609	-100.173	-4.617	44.090	1.00	21.97
23029	CA	VAL	D	609	-100.330	-4.835	45.529	1.00	22.43
23030	CB	VAL	D	609	-101.749	-5.254	45.905	1.00	22.62
23031	CG1	VAL	D	609	-101.836	-5.550	47.428	1.00	22.40
23032	CG2	VAL	D	609	-102.699	-4.105	45.568	1.00	22.38
23033	C	VAL	D	609	-99.312	-5.822	46.066	1.00	23.00
23034	O	VAL	D	609	-98.640	-5.546	47.077	1.00	23.05
23035	N	THR	D	610	-99.167	-6.943	45.356	1.00	23.22
23036	CA	THR	D	610	-98.195	-7.967	45.702	1.00	23.21
23037	CB	THR	D	610	-98.125	-9.072	44.599	1.00	22.93
23038	OG1	THR	D	610	-99.203	-9.996	44.777	1.00	22.62
23039	CG2	THR	D	610	-96.871	-9.962	44.779	1.00	22.26
23040	C	THR	D	610	-96.834	-7.352	45.873	1.00	23.38
23041	O	THR	D	610	-96.152	-7.606	46.865	1.00	23.59
23042	N	SER	D	611	-96.431	-6.556	44.887	1.00	23.59



FIGURE 3 QJ

A	B	C	D	E	F	G	H	I	J
23043	CA	SER	D	611	-95.111	-5.923	44.880	1.00	23.09
23044	CB	SER	D	611	-94.866	-5.263	43.533	1.00	23.14
23045	OG	SER	D	611	-94.870	-6.221	42.488	1.00	23.80
23046	C	SER	D	611	-94.981	-4.878	45.993	1.00	23.31
23047	O	SER	D	611	-93.948	-4.797	46.667	1.00	23.41
23048	N	MET	D	612	-96.041	-4.089	46.177	1.00	22.64
23049	CA	MET	D	612	-96.097	-3.081	47.219	1.00	21.73
23050	CB	MET	D	612	-97.403	-2.311	47.109	1.00	21.27
23051	CG	MET	D	612	-97.449	-1.400	45.874	1.00	20.75
23052	SD	MET	D	612	-96.138	-0.132	45.962	1.00	22.54
23053	CE	MET	D	612	-96.942	0.982	47.037	1.00	20.15
23054	C	MET	D	612	-95.945	-3.743	48.593	1.00	22.23
23055	O	MET	D	612	-95.235	-3.233	49.474	1.00	21.46
23056	N	VAL	D	613	-96.611	-4.889	48.753	1.00	21.78
23057	CA	VAL	D	613	-96.542	-5.669	49.981	1.00	21.13
23058	CB	VAL	D	613	-97.625	-6.782	49.969	1.00	21.05
23059	CG1	VAL	D	613	-97.274	-7.913	50.941	1.00	21.49
23060	CG2	VAL	D	613	-99.002	-6.207	50.242	1.00	19.63
23061	C	VAL	D	613	-95.142	-6.282	50.115	1.00	21.21
23062	O	VAL	D	613	-94.525	-6.234	51.180	1.00	22.38
23063	N	LEU	D	614	-94.598	-6.833	49.041	1.00	21.20
23064	CA	LEU	D	614	-93.247	-7.387	49.152	1.00	21.30
23065	CB	LEU	D	614	-92.854	-8.140	47.900	1.00	20.29
23066	CG	LEU	D	614	-93.636	-9.428	47.666	1.00	19.95
23067	CD1	LEU	D	614	-93.462	-10.439	48.841	1.00	19.35
23068	CD2	LEU	D	614	-93.206	-10.047	46.380	1.00	15.59
23069	C	LEU	D	614	-92.170	-6.344	49.497	1.00	22.17
23070	O	LEU	D	614	-91.159	-6.684	50.102	1.00	22.67
23071	N	GLY	D	615	-92.377	-5.083	49.126	1.00	22.27
23072	CA	GLY	D	615	-91.395	-4.061	49.410	1.00	22.40
23073	C	GLY	D	615	-91.726	-3.183	50.605	1.00	23.25
23074	O	GLY	D	615	-91.081	-2.134	50.848	1.00	23.33
23075	N	SER	D	616	-92.711	-3.629	51.376	1.00	23.60
23076	CA	SER	D	616	-93.200	-2.904	52.534	1.00	23.70
23077	CB	SER	D	616	-94.596	-3.413	52.874	1.00	23.88
23078	OG	SER	D	616	-94.509	-4.694	53.490	1.00	25.47
23079	C	SER	D	616	-92.343	-3.029	53.790	1.00	24.16
23080	O	SER	D	616	-92.471	-2.208	54.698	1.00	25.00
23081	N	GLY	D	617	-91.498	-4.049	53.870	1.00	24.13
23082	CA	GLY	D	617	-90.726	-4.287	55.080	1.00	24.51
23083	C	GLY	D	617	-91.497	-4.875	56.253	1.00	25.66
23084	O	GLY	D	617	-91.042	-4.815	57.394	1.00	26.49
23085	N	SER	D	618	-92.654	-5.477	55.997	1.00	25.95
23086	CA	SER	D	618	-93.486	-5.940	57.090	1.00	26.12
23087	CB	SER	D	618	-94.913	-6.191	56.618	1.00	25.79
23088	OG	SER	D	618	-94.958	-7.356	55.822	1.00	25.11
23089	C	SER	D	618	-92.940	-7.214	57.721	1.00	27.16
23090	O	SER	D	618	-93.216	-7.500	58.885	1.00	27.72
23091	N	GLY	D	619	-92.197	-7.991	56.950	1.00	26.87
23092	CA	GLY	D	619	-91.651	-9.226	57.467	1.00	27.32
23093	C	GLY	D	619	-92.606	-10.409	57.474	1.00	27.28

FIGURE 3 QK

A	B	C	D	E	F	G	H	I	J
23094	O	GLY	D	619	-92.235	-11.504	57.864	1.00	27.63
23095	N	VAL	D	620	-93.816	-10.215	56.990	1.00	26.98
23096	CA	VAL	D	620	-94.823	-11.272	57.054	1.00	26.82
23097	CB	VAL	D	620	-96.215	-10.663	57.128	1.00	27.10
23098	CG1	VAL	D	620	-97.299	-11.735	57.065	1.00	27.01
23099	CG2	VAL	D	620	-96.327	-9.803	58.398	1.00	25.69
23100	C	VAL	D	620	-94.751	-12.234	55.886	1.00	26.89
23101	O	VAL	D	620	-95.068	-13.412	56.022	1.00	27.36
23102	N	PHE	D	621	-94.293	-11.741	54.743	1.00	26.24
23103	CA	PHE	D	621	-94.230	-12.554	53.554	1.00	25.32
23104	CB	PHE	D	621	-94.896	-11.806	52.380	1.00	25.19
23105	CG	PHE	D	621	-96.339	-11.424	52.653	1.00	23.16
23106	CD1	PHE	D	621	-96.642	-10.280	53.349	1.00	20.70
23107	CE1	PHE	D	621	-97.964	-9.940	53.621	1.00	19.37
23108	CZ	PHE	D	621	-98.987	-10.744	53.191	1.00	20.10
23109	CE2	PHE	D	621	-98.703	-11.898	52.500	1.00	19.43
23110	CD2	PHE	D	621	-97.385	-12.233	52.228	1.00	21.78
23111	C	PHE	D	621	-92.809	-12.976	53.230	1.00	25.90
23112	O	PHE	D	621	-91.863	-12.192	53.302	1.00	26.42
23113	N	LYS	D	622	-92.658	-14.231	52.874	1.00	26.12
23114	CA	LYS	D	622	-91.356	-14.759	52.530	1.00	27.08
23115	CB	LYS	D	622	-91.336	-16.265	52.812	1.00	26.96
23116	CG	LYS	D	622	-89.995	-16.936	52.586	1.00	28.63
23117	CD	LYS	D	622	-90.086	-18.436	52.926	1.00	30.58
23118	CE	LYS	D	622	-88.716	-19.103	52.885	1.00	33.11
23119	NZ	LYS	D	622	-88.146	-19.197	51.521	1.00	34.13
23120	C	LYS	D	622	-91.074	-14.517	51.048	1.00	26.97
23121	O	LYS	D	622	-89.949	-14.222	50.655	1.00	26.68
23122	N	CYS	D	623	-92.114	-14.624	50.228	1.00	27.32
23123	CA	CYS	D	623	-91.939	-14.514	48.789	1.00	27.63
23124	CB	CYS	D	623	-91.486	-15.855	48.239	1.00	28.04
23125	SG	CYS	D	623	-92.673	-17.133	48.612	1.00	32.49
23126	C	CYS	D	623	-93.240	-14.143	48.116	1.00	26.28
23127	O	CYS	D	623	-94.290	-14.113	48.749	1.00	26.71
23128	N	GLY	D	624	-93.169	-13.870	46.823	1.00	24.98
23129	CA	GLY	D	624	-94.353	-13.530	46.069	1.00	23.48
23130	C	GLY	D	624	-94.092	-13.437	44.577	1.00	23.30
23131	O	GLY	D	624	-92.936	-13.432	44.120	1.00	22.53
23132	N	ILE	D	625	-95.188	-13.372	43.822	1.00	22.21
23133	CA	ILE	D	625	-95.137	-13.374	42.385	1.00	21.40
23134	CB	ILE	D	625	-95.706	-14.692	41.842	1.00	21.55
23135	CG1	ILE	D	625	-95.026	-15.905	42.472	1.00	21.25
23136	CD1	ILE	D	625	-95.620	-17.199	41.976	1.00	22.46
23137	CG2	ILE	D	625	-95.572	-14.742	40.327	1.00	20.26
23138	C	ILE	D	625	-96.022	-12.264	41.865	1.00	21.62
23139	O	ILE	D	625	-97.201	-12.201	42.211	1.00	20.79
23140	N	ALA	D	626	-95.466	-11.399	41.024	1.00	21.33
23141	CA	ALA	D	626	-96.262	-10.317	40.453	1.00	21.56
23142	CB	ALA	D	626	-95.638	-8.956	40.754	1.00	21.64
23143	C	ALA	D	626	-96.331	-10.525	38.960	1.00	21.03
23144	O	ALA	D	626	-95.311	-10.566	38.290	1.00	21.70

FIGURE 3 QL

A	B	C	D	E	F	G	H	I	J
23145	N	VAL	D	627	-97.534	-10.641	38.434	1.00	20.44
23146	CA	VAL	D	627	-97.698	-10.876	37.010	1.00	19.92
23147	CB	VAL	D	627	-98.638	-12.074	36.779	1.00	19.63
23148	CG1	VAL	D	627	-98.779	-12.364	35.328	1.00	19.32
23149	CG2	VAL	D	627	-98.121	-13.277	37.526	1.00	19.10
23150	C	VAL	D	627	-98.270	-9.636	36.336	1.00	19.71
23151	O	VAL	D	627	-99.321	-9.147	36.741	1.00	20.98
23152	N	ALA	D	628	-97.564	-9.119	35.334	1.00	19.16
23153	CA	ALA	D	628	-97.994	-7.944	34.606	1.00	19.09
23154	CB	ALA	D	628	-99.125	-8.313	33.667	1.00	19.00
23155	C	ALA	D	628	-98.443	-6.846	35.563	1.00	19.80
23156	O	ALA	D	628	-99.564	-6.318	35.442	1.00	20.29
23157	N	PRO	D	629	-97.596	-6.499	36.524	1.00	19.51
23158	CA	PRO	D	629	-97.984	-5.513	37.533	1.00	19.62
23159	CB	PRO	D	629	-96.889	-5.669	38.584	1.00	19.78
23160	CG	PRO	D	629	-95.679	-5.993	37.730	1.00	20.27
23161	CD	PRO	D	629	-96.236	-7.022	36.749	1.00	19.35
23162	C	PRO	D	629	-97.927	-4.088	37.040	1.00	20.11
23163	O	PRO	D	629	-97.120	-3.718	36.174	1.00	20.33
23164	N	VAL	D	630	-98.806	-3.274	37.594	1.00	20.35
23165	CA	VAL	D	630	-98.654	-1.844	37.453	1.00	20.36
23166	CB	VAL	D	630	-99.956	-1.119	37.858	1.00	20.44
23167	CG1	VAL	D	630	-99.658	0.296	38.468	1.00	19.91
23168	CG2	VAL	D	630	-100.903	-1.027	36.674	1.00	19.46
23169	C	VAL	D	630	-97.512	-1.548	38.458	1.00	20.76
23170	O	VAL	D	630	-97.420	-2.207	39.502	1.00	19.76
23171	N	SER	D	631	-96.628	-0.601	38.138	1.00	20.86
23172	CA	SER	D	631	-95.524	-0.284	39.027	1.00	21.41
23173	CB	SER	D	631	-94.183	-0.668	38.404	1.00	21.58
23174	OG	SER	D	631	-93.908	0.098	37.254	1.00	22.64
23175	C	SER	D	631	-95.514	1.186	39.452	1.00	21.56
23176	O	SER	D	631	-95.023	1.506	40.528	1.00	20.61
23177	N	ARG	D	632	-96.002	2.066	38.579	1.00	21.04
23178	CA	ARG	D	632	-96.184	3.465	38.917	1.00	22.20
23179	CB	ARG	D	632	-94.932	4.341	38.755	1.00	23.16
23180	CG	ARG	D	632	-94.545	4.709	37.399	1.00	25.77
23181	CD	ARG	D	632	-94.066	6.140	37.276	1.00	30.32
23182	NE	ARG	D	632	-93.188	6.556	38.351	1.00	32.43
23183	CZ	ARG	D	632	-92.553	7.733	38.389	1.00	35.70
23184	NH1	ARG	D	632	-91.777	8.011	39.428	1.00	34.00
23185	NH2	ARG	D	632	-92.684	8.632	37.395	1.00	34.81
23186	C	ARG	D	632	-97.372	3.964	38.133	1.00	21.99
23187	O	ARG	D	632	-97.580	3.572	36.982	1.00	21.10
23188	N	TRP	D	633	-98.195	4.759	38.808	1.00	21.72
23189	CA	TRP	D	633	-99.493	5.143	38.269	1.00	22.29
23190	CB	TRP	D	633	-100.405	5.680	39.393	1.00	22.18
23191	CG	TRP	D	633	-100.858	4.501	40.246	1.00	22.76
23192	CD1	TRP	D	633	-100.506	4.231	41.540	1.00	20.58
23193	NE1	TRP	D	633	-101.080	3.053	41.947	1.00	20.97
23194	CE2	TRP	D	633	-101.825	2.535	40.916	1.00	21.34
23195	CD2	TRP	D	633	-101.691	3.410	39.822	1.00	20.22

FIGURE 3 QM

A	B	C	D	E	F	G	H	I	J
23196	CE3	TRP	D	633	-102.353	3.095	38.629	1.00	20.65
23197	CZ3	TRP	D	633	-103.099	1.934	38.560	1.00	20.30
23198	CH2	TRP	D	633	-103.204	1.076	39.662	1.00	20.21
23199	CZ2	TRP	D	633	-102.558	1.344	40.840	1.00	19.01
23200	C	TRP	D	633	-99.452	6.006	37.031	1.00	22.40
23201	O	TRP	D	633	-100.365	5.963	36.230	1.00	23.36
23202	N	GLU	D	634	-98.373	6.737	36.832	1.00	23.31
23203	CA	GLU	D	634	-98.252	7.551	35.634	1.00	24.08
23204	CB	GLU	D	634	-97.082	8.534	35.714	1.00	24.74
23205	CG	GLU	D	634	-97.298	9.664	36.714	1.00	26.01
23206	CD	GLU	D	634	-96.482	9.460	37.972	1.00	31.66
23207	OE1	GLU	D	634	-95.612	10.335	38.201	1.00	32.18
23208	OE2	GLU	D	634	-96.691	8.419	38.703	1.00	30.86
23209	C	GLU	D	634	-98.114	6.703	34.391	1.00	23.69
23210	O	GLU	D	634	-98.362	7.200	33.303	1.00	23.35
23211	N	TYR	D	635	-97.718	5.434	34.537	1.00	23.21
23212	CA	TYR	D	635	-97.615	4.548	33.372	1.00	22.82
23213	CB	TYR	D	635	-96.723	3.345	33.640	1.00	22.54
23214	CG	TYR	D	635	-95.283	3.663	33.966	1.00	24.14
23215	CD1	TYR	D	635	-94.726	4.898	33.641	1.00	23.13
23216	CE1	TYR	D	635	-93.418	5.183	33.938	1.00	23.12
23217	CZ	TYR	D	635	-92.646	4.231	34.583	1.00	24.31
23218	OH	TYR	D	635	-91.347	4.502	34.892	1.00	23.90
23219	CE2	TYR	D	635	-93.173	3.005	34.923	1.00	24.61
23220	CD2	TYR	D	635	-94.480	2.723	34.611	1.00	24.33
23221	C	TYR	D	635	-98.959	3.976	32.978	1.00	22.64
23222	O	TYR	D	635	-99.123	3.441	31.878	1.00	22.13
23223	N	TYR	D	636	-99.927	4.025	33.876	1.00	22.22
23224	CA	TYR	D	636	-101.162	3.352	33.526	1.00	22.38
23225	CB	TYR	D	636	-101.788	2.660	34.727	1.00	21.80
23226	CG	TYR	D	636	-102.788	1.640	34.286	1.00	19.84
23227	CD1	TYR	D	636	-102.417	0.625	33.436	1.00	18.32
23228	CE1	TYR	D	636	-103.335	-0.316	32.998	1.00	20.41
23229	CZ	TYR	D	636	-104.628	-0.238	33.413	1.00	20.72
23230	OH	TYR	D	636	-105.537	-1.174	32.967	1.00	24.19
23231	CE2	TYR	D	636	-105.030	0.781	34.259	1.00	20.82
23232	CD2	TYR	D	636	-104.113	1.723	34.673	1.00	18.74
23233	C	TYR	D	636	-102.146	4.258	32.778	1.00	22.84
23234	O	TYR	D	636	-101.933	5.461	32.700	1.00	23.58
23235	N	ASP	D	637	-103.179	3.680	32.178	1.00	23.34
23236	CA	ASP	D	637	-104.079	4.478	31.365	1.00	24.69
23237	CB	ASP	D	637	-105.030	3.616	30.523	1.00	24.97
23238	CG	ASP	D	637	-106.145	3.012	31.328	1.00	25.70
23239	OD1	ASP	D	637	-106.957	3.784	31.853	1.00	26.97
23240	OD2	ASP	D	637	-106.313	1.778	31.453	1.00	26.60
23241	C	ASP	D	637	-104.798	5.545	32.178	1.00	25.32
23242	O	ASP	D	637	-104.842	5.495	33.411	1.00	25.23
23243	N	SER	D	638	-105.354	6.522	31.474	1.00	25.73
23244	CA	SER	D	638	-105.904	7.694	32.132	1.00	25.90
23245	CB	SER	D	638	-105.934	8.843	31.140	1.00	25.38
23246	OG	SER	D	638	-106.815	8.506	30.101	1.00	26.53

FIGURE 3 QN

A	B	C	D	E	F	G	H	I	J
23247	C	SER	D	638	-107.281	7.516	32.777	1.00	25.91
23248	O	SER	D	638	-107.500	7.960	33.897	1.00	25.61
23249	N	VAL	D	639	-108.218	6.863	32.103	1.00	26.51
23250	CA	VAL	D	639	-109.543	6.834	32.699	1.00	27.09
23251	CB	VAL	D	639	-110.686	6.551	31.688	1.00	27.52
23252	CG1	VAL	D	639	-111.496	5.339	32.069	1.00	29.06
23253	CG2	VAL	D	639	-110.168	6.505	30.248	1.00	28.47
23254	C	VAL	D	639	-109.596	5.992	33.977	1.00	26.75
23255	O	VAL	D	639	-110.272	6.357	34.932	1.00	26.42
23256	N	TYR	D	640	-108.832	4.905	34.014	1.00	26.18
23257	CA	TYR	D	640	-108.798	4.075	35.205	1.00	25.96
23258	CB	TYR	D	640	-108.168	2.719	34.893	1.00	25.44
23259	CG	TYR	D	640	-108.145	1.767	36.066	1.00	24.92
23260	CD1	TYR	D	640	-109.119	0.787	36.205	1.00	24.01
23261	CE1	TYR	D	640	-109.100	-0.084	37.269	1.00	21.51
23262	CZ	TYR	D	640	-108.096	0.010	38.227	1.00	22.81
23263	OH	TYR	D	640	-108.097	-0.872	39.286	1.00	23.49
23264	CE2	TYR	D	640	-107.130	0.967	38.134	1.00	21.03
23265	CD2	TYR	D	640	-107.149	1.846	37.050	1.00	24.50
23266	C	TYR	D	640	-108.032	4.762	36.337	1.00	25.42
23267	O	TYR	D	640	-108.579	5.006	37.400	1.00	25.71
23268	N	THR	D	641	-106.769	5.067	36.080	1.00	25.09
23269	CA	THR	D	641	-105.878	5.672	37.052	1.00	25.10
23270	CB	THR	D	641	-104.534	5.962	36.403	1.00	24.83
23271	OG1	THR	D	641	-103.960	4.743	35.940	1.00	26.06
23272	CG2	THR	D	641	-103.534	6.479	37.441	1.00	24.57
23273	C	THR	D	641	-106.408	6.976	37.630	1.00	25.18
23274	O	THR	D	641	-106.429	7.163	38.848	1.00	24.41
23275	N	GLU	D	642	-106.830	7.872	36.749	1.00	24.77
23276	CA	GLU	D	642	-107.304	9.174	37.187	1.00	25.52
23277	CB	GLU	D	642	-107.435	10.125	35.991	1.00	25.53
23278	CG	GLU	D	642	-106.086	10.541	35.424	1.00	25.78
23279	CD	GLU	D	642	-106.193	11.254	34.090	1.00	26.46
23280	OE1	GLU	D	642	-107.337	11.592	33.676	1.00	23.00
23281	OE2	GLU	D	642	-105.122	11.473	33.469	1.00	27.43
23282	C	GLU	D	642	-108.606	9.070	37.976	1.00	25.69
23283	O	GLU	D	642	-108.879	9.886	38.858	1.00	26.67
23284	N	ARG	D	643	-109.400	8.053	37.686	1.00	25.27
23285	CA	ARG	D	643	-110.625	7.839	38.437	1.00	25.75
23286	CB	ARG	D	643	-111.233	6.507	38.014	1.00	26.11
23287	CG	ARG	D	643	-112.604	6.225	38.580	1.00	26.46
23288	CD	ARG	D	643	-113.448	5.411	37.619	1.00	30.50
23289	NE	ARG	D	643	-112.919	4.068	37.485	1.00	32.80
23290	CZ	ARG	D	643	-112.837	3.381	36.360	1.00	31.23
23291	NH1	ARG	D	643	-112.334	2.160	36.397	1.00	31.11
23292	NH2	ARG	D	643	-113.239	3.895	35.214	1.00	30.58
23293	C	ARG	D	643	-110.356	7.800	39.963	1.00	25.90
23294	O	ARG	D	643	-111.142	8.302	40.767	1.00	24.71
23295	N	TYR	D	644	-109.234	7.184	40.332	1.00	25.76
23296	CA	TYR	D	644	-108.868	7.006	41.723	1.00	26.45
23297	CB	TYR	D	644	-108.476	5.531	41.957	1.00	26.40

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 QO**

A	B	C	D	E	F	G	H	I	J
23298	CG	TYR	D	644	-109.364	4.543	41.220	1.00	25.41
23299	CD1	TYR	D	644	-110.679	4.338	41.610	1.00	25.27
23300	CE1	TYR	D	644	-111.490	3.447	40.952	1.00	24.47
23301	CZ	TYR	D	644	-111.002	2.750	39.857	1.00	25.81
23302	OH	TYR	D	644	-111.812	1.859	39.198	1.00	25.64
23303	CE2	TYR	D	644	-109.713	2.942	39.432	1.00	25.89
23304	CD2	TYR	D	644	-108.897	3.847	40.123	1.00	26.08
23305	C	TYR	D	644	-107.705	7.905	42.130	1.00	26.93
23306	O	TYR	D	644	-107.502	8.189	43.308	1.00	27.89
23307	N	MET	D	645	-106.933	8.371	41.165	1.00	27.11
23308	CA	MET	D	645	-105.748	9.118	41.523	1.00	27.40
23309	CB	MET	D	645	-104.524	8.520	40.829	1.00	26.37
23310	CG	MET	D	645	-104.119	7.185	41.357	1.00	26.82
23311	SD	MET	D	645	-103.523	7.225	43.053	1.00	28.13
23312	CE	MET	D	645	-101.827	7.877	42.790	1.00	24.04
23313	C	MET	D	645	-105.807	10.586	41.198	1.00	27.88
23314	O	MET	D	645	-104.871	11.308	41.506	1.00	28.19
23315	N	GLY	D	646	-106.880	11.040	40.562	1.00	28.54
23316	CA	GLY	D	646	-106.888	12.418	40.121	1.00	28.79
23317	C	GLY	D	646	-105.752	12.594	39.113	1.00	29.56
23318	O	GLY	D	646	-105.264	11.621	38.514	1.00	29.39
23319	N	LEU	D	647	-105.303	13.827	38.936	1.00	29.71
23320	CA	LEU	D	647	-104.274	14.117	37.944	1.00	30.13
23321	CB	LEU	D	647	-104.607	15.454	37.282	1.00	30.79
23322	CG	LEU	D	647	-105.479	15.373	36.022	1.00	32.03
23323	CD1	LEU	D	647	-106.021	13.998	35.837	1.00	32.06
23324	CD2	LEU	D	647	-106.609	16.389	36.060	1.00	33.49
23325	C	LEU	D	647	-102.884	14.158	38.572	1.00	29.81
23326	O	LEU	D	647	-102.739	14.593	39.702	1.00	30.86
23327	N	PRO	D	648	-101.863	13.686	37.869	1.00	29.42
23328	CA	PRO	D	648	-100.499	13.715	38.400	1.00	29.27
23329	CB	PRO	D	648	-99.788	12.641	37.569	1.00	29.19
23330	CG	PRO	D	648	-100.474	12.645	36.284	1.00	28.08
23331	CD	PRO	D	648	-101.919	13.047	36.542	1.00	29.14
23332	C	PRO	D	648	-99.792	15.061	38.210	1.00	29.74
23333	O	PRO	D	648	-98.744	15.100	37.580	1.00	29.58
23334	N	THR	D	649	-100.363	16.136	38.740	1.00	30.57
23335	CA	THR	D	649	-99.763	17.472	38.651	1.00	31.80
23336	CB	THR	D	649	-100.702	18.440	37.937	1.00	31.39
23337	OG1	THR	D	649	-101.944	18.494	38.654	1.00	33.99
23338	CG2	THR	D	649	-101.101	17.906	36.591	1.00	31.18
23339	C	THR	D	649	-99.533	18.010	40.050	1.00	32.36
23340	O	THR	D	649	-100.146	17.548	41.010	1.00	32.49
23341	N	PRO	D	650	-98.683	19.020	40.173	1.00	33.18
23342	CA	PRO	D	650	-98.400	19.602	41.489	1.00	33.36
23343	CB	PRO	D	650	-97.313	20.651	41.200	1.00	33.52
23344	CG	PRO	D	650	-96.782	20.316	39.830	1.00	33.60
23345	CD	PRO	D	650	-97.962	19.701	39.080	1.00	33.10
23346	C	PRO	D	650	-99.652	20.244	42.100	1.00	34.02
23347	O	PRO	D	650	-99.718	20.423	43.307	1.00	33.80
23348	N	GLU	D	651	-100.651	20.577	41.292	1.00	34.80

FIGURE 3 QP

A	B	C	D	E	F	G	H	I	J
23349	CA	GLU	D	651	-101.858	21.125	41.903	1.00	35.73
23350	CB	GLU	D	651	-102.394	22.357	41.159	1.00	36.27
23351	CG	GLU	D	651	-102.305	22.323	39.650	1.00	38.03
23352	CD	GLU	D	651	-100.901	22.573	39.124	1.00	39.96
23353	OE1	GLU	D	651	-100.606	22.074	38.006	1.00	39.36
23354	OE2	GLU	D	651	-100.109	23.270	39.807	1.00	39.77
23355	C	GLU	D	651	-102.954	20.091	42.211	1.00	35.65
23356	O	GLU	D	651	-103.973	20.423	42.834	1.00	35.50
23357	N	ASP	D	652	-102.725	18.829	41.827	1.00	35.10
23358	CA	ASP	D	652	-103.686	17.778	42.146	1.00	34.67
23359	CB	ASP	D	652	-104.341	17.182	40.884	1.00	35.01
23360	CG	ASP	D	652	-105.584	16.345	41.200	1.00	36.32
23361	OD1	ASP	D	652	-106.426	16.135	40.285	1.00	39.06
23362	OD2	ASP	D	652	-105.814	15.854	42.332	1.00	36.42
23363	C	ASP	D	652	-103.070	16.695	43.027	1.00	33.99
23364	O	ASP	D	652	-103.006	16.851	44.240	1.00	34.82
23365	N	ASN	D	653	-102.588	15.603	42.445	1.00	32.68
23366	CA	ASN	D	653	-102.123	14.520	43.299	1.00	31.77
23367	CB	ASN	D	653	-103.154	13.387	43.280	1.00	30.55
23368	CG	ASN	D	653	-103.142	12.555	44.552	1.00	29.09
23369	OD1	ASN	D	653	-102.564	12.946	45.573	1.00	26.00
23370	ND2	ASN	D	653	-103.815	11.404	44.504	1.00	26.65
23371	C	ASN	D	653	-100.730	13.976	43.006	1.00	31.49
23372	O	ASN	D	653	-100.435	12.850	43.358	1.00	31.75
23373	N	LEU	D	654	-99.863	14.774	42.390	1.00	31.54
23374	CA	LEU	D	654	-98.547	14.264	42.003	1.00	30.92
23375	CB	LEU	D	654	-97.725	15.319	41.292	1.00	31.00
23376	CG	LEU	D	654	-96.359	14.774	40.877	1.00	31.08
23377	CD1	LEU	D	654	-95.323	15.888	40.781	1.00	32.92
23378	CD2	LEU	D	654	-96.457	14.000	39.578	1.00	27.02
23379	C	LEU	D	654	-97.708	13.657	43.124	1.00	30.82
23380	O	LEU	D	654	-96.990	12.690	42.904	1.00	30.53
23381	N	ASP	D	655	-97.764	14.218	44.318	1.00	30.70
23382	CA	ASP	D	655	-96.947	13.652	45.376	1.00	31.26
23383	CB	ASP	D	655	-96.979	14.507	46.637	1.00	31.48
23384	CG	ASP	D	655	-96.491	15.922	46.383	1.00	34.42
23385	OD1	ASP	D	655	-95.630	16.118	45.483	1.00	34.31
23386	OD2	ASP	D	655	-96.934	16.900	47.029	1.00	38.79
23387	C	ASP	D	655	-97.355	12.210	45.668	1.00	30.63
23388	O	ASP	D	655	-96.499	11.338	45.813	1.00	30.49
23389	N	HIS	D	656	-98.648	11.934	45.743	1.00	29.83
23390	CA	HIS	D	656	-98.994	10.550	46.002	1.00	29.73
23391	CB	HIS	D	656	-100.438	10.328	46.446	1.00	29.65
23392	CG	HIS	D	656	-100.671	8.920	46.884	1.00	30.71
23393	ND1	HIS	D	656	-99.932	8.331	47.889	1.00	30.42
23394	CE1	HIS	D	656	-100.300	7.072	48.021	1.00	30.17
23395	NE2	HIS	D	656	-101.242	6.816	47.131	1.00	28.07
23396	CD2	HIS	D	656	-101.478	7.952	46.394	1.00	30.82
23397	C	HIS	D	656	-98.630	9.638	44.819	1.00	28.97
23398	O	HIS	D	656	-98.252	8.501	45.036	1.00	28.51
23399	N	TYR	D	657	-98.718	10.147	43.588	1.00	28.14

FIGURE 3 QQ

A	B	C	D	E	F	G	H	I	J
23400	CA	TYR	D	657	-98.286	9.375	42.424	1.00	28.19
23401	CB	TYR	D	657	-98.376	10.193	41.139	1.00	27.67
23402	CG	TYR	D	657	-99.674	10.121	40.365	1.00	26.53
23403	CD1	TYR	D	657	-99.802	9.308	39.255	1.00	24.07
23404	CE1	TYR	D	657	-100.986	9.275	38.524	1.00	23.58
23405	CZ	TYR	D	657	-102.041	10.075	38.907	1.00	24.30
23406	OH	TYR	D	657	-103.245	10.065	38.206	1.00	20.81
23407	CE2	TYR	D	657	-101.912	10.903	40.001	1.00	23.39
23408	CD2	TYR	D	657	-100.743	10.935	40.701	1.00	25.39
23409	C	TYR	D	657	-96.831	8.985	42.554	1.00	28.74
23410	O	TYR	D	657	-96.433	7.886	42.167	1.00	28.89
23411	N	ARG	D	658	-96.024	9.899	43.077	1.00	29.24
23412	CA	ARG	D	658	-94.595	9.664	43.158	1.00	29.78
23413	CB	ARG	D	658	-93.843	10.986	43.273	1.00	29.78
23414	CG	ARG	D	658	-93.840	11.758	41.990	1.00	30.49
23415	CD	ARG	D	658	-93.500	10.875	40.774	1.00	33.83
23416	NE	ARG	D	658	-93.915	11.491	39.519	1.00	32.92
23417	CZ	ARG	D	658	-93.256	12.469	38.929	1.00	33.21
23418	NH1	ARG	D	658	-92.145	12.928	39.478	1.00	33.18
23419	NH2	ARG	D	658	-93.701	12.980	37.786	1.00	33.18
23420	C	ARG	D	658	-94.269	8.807	44.344	1.00	30.14
23421	O	ARG	D	658	-93.181	8.244	44.439	1.00	30.68
23422	N	ASN	D	659	-95.218	8.731	45.257	1.00	30.69
23423	CA	ASN	D	659	-95.044	7.998	46.496	1.00	31.33
23424	CB	ASN	D	659	-95.796	8.704	47.625	1.00	32.34
23425	CG	ASN	D	659	-94.874	9.237	48.681	1.00	36.48
23426	OD1	ASN	D	659	-94.189	10.246	48.469	1.00	41.41
23427	ND2	ASN	D	659	-94.811	8.542	49.827	1.00	39.55
23428	C	ASN	D	659	-95.549	6.578	46.444	1.00	30.22
23429	O	ASN	D	659	-95.230	5.802	47.316	1.00	30.45
23430	N	SER	D	660	-96.362	6.248	45.444	1.00	28.90
23431	CA	SER	D	660	-96.971	4.929	45.403	1.00	27.43
23432	CB	SER	D	660	-98.493	5.075	45.292	1.00	27.34
23433	OG	SER	D	660	-98.852	5.896	44.191	1.00	26.77
23434	C	SER	D	660	-96.400	3.989	44.318	1.00	26.29
23435	O	SER	D	660	-97.068	3.064	43.845	1.00	25.76
23436	N	THR	D	661	-95.155	4.221	43.941	1.00	24.89
23437	CA	THR	D	661	-94.514	3.377	42.960	1.00	23.90
23438	CB	THR	D	661	-93.373	4.143	42.316	1.00	24.52
23439	OG1	THR	D	661	-92.362	4.347	43.308	1.00	25.03
23440	CG2	THR	D	661	-93.800	5.542	41.940	1.00	23.39
23441	C	THR	D	661	-93.891	2.180	43.653	1.00	22.71
23442	O	THR	D	661	-93.467	2.280	44.804	1.00	21.58
23443	N	VAL	D	662	-93.778	1.054	42.961	1.00	21.39
23444	CA	VAL	D	662	-93.064	-0.028	43.610	1.00	20.70
23445	CB	VAL	D	662	-93.480	-1.500	43.158	1.00	20.31
23446	CG1	VAL	D	662	-94.804	-1.542	42.414	1.00	17.64
23447	CG2	VAL	D	662	-92.383	-2.269	42.485	1.00	16.38
23448	C	VAL	D	662	-91.563	0.236	43.600	1.00	21.43
23449	O	VAL	D	662	-90.860	-0.163	44.525	1.00	22.11
23450	N	MET	D	663	-91.078	0.929	42.569	1.00	22.18



FIGURE 3 QR

A	B	C	D	E	F	G	H	I	J
23451	CA	MET	D	663	-89.658	1.265	42.469	1.00	22.22
23452	CB	MET	D	663	-89.362	2.125	41.223	1.00	22.16
23453	CG	MET	D	663	-89.309	1.330	39.884	1.00	20.41
23454	SD	MET	D	663	-90.971	0.820	39.315	1.00	20.24
23455	CE	MET	D	663	-91.665	2.361	38.782	1.00	17.95
23456	C	MET	D	663	-89.071	1.930	43.709	1.00	23.01
23457	O	MET	D	663	-87.908	1.695	44.039	1.00	24.00
23458	N	SER	D	664	-89.840	2.751	44.409	1.00	23.37
23459	CA	SER	D	664	-89.273	3.427	45.571	1.00	24.66
23460	CB	SER	D	664	-90.184	4.544	46.035	1.00	25.02
23461	OG	SER	D	664	-91.461	4.013	46.338	1.00	27.47
23462	C	SER	D	664	-89.039	2.465	46.740	1.00	25.06
23463	O	SER	D	664	-88.336	2.799	47.696	1.00	24.70
23464	N	ARG	D	665	-89.614	1.268	46.649	1.00	24.56
23465	CA	ARG	D	665	-89.456	0.284	47.700	1.00	24.85
23466	CB	ARG	D	665	-90.798	-0.369	47.999	1.00	24.78
23467	CG	ARG	D	665	-91.809	0.640	48.551	1.00	25.88
23468	CD	ARG	D	665	-93.214	0.129	48.642	1.00	26.79
23469	NE	ARG	D	665	-94.129	1.112	49.216	1.00	26.35
23470	CZ	ARG	D	665	-95.170	0.782	49.957	1.00	27.60
23471	NH1	ARG	D	665	-95.418	-0.496	50.206	1.00	28.66
23472	NH2	ARG	D	665	-95.967	1.715	50.455	1.00	29.38
23473	C	ARG	D	665	-88.441	-0.766	47.343	1.00	24.22
23474	O	ARG	D	665	-88.350	-1.778	48.011	1.00	24.33
23475	N	ALA	D	666	-87.675	-0.518	46.292	1.00	24.52
23476	CA	ALA	D	666	-86.732	-1.511	45.771	1.00	24.78
23477	CB	ALA	D	666	-85.950	-0.935	44.627	1.00	24.85
23478	C	ALA	D	666	-85.784	-2.118	46.790	1.00	25.15
23479	O	ALA	D	666	-85.509	-3.314	46.751	1.00	25.19
23480	N	GLU	D	667	-85.271	-1.302	47.697	1.00	25.94
23481	CA	GLU	D	667	-84.308	-1.783	48.683	1.00	26.94
23482	CB	GLU	D	667	-83.817	-0.616	49.578	1.00	27.70
23483	CG	GLU	D	667	-82.794	-0.998	50.658	1.00	31.37
23484	CD	GLU	D	667	-81.432	-1.370	50.083	1.00	34.98
23485	OE1	GLU	D	667	-80.668	-2.100	50.756	1.00	36.00
23486	OE2	GLU	D	667	-81.123	-0.940	48.947	1.00	37.23
23487	C	GLU	D	667	-84.913	-2.892	49.526	1.00	26.63
23488	O	GLU	D	667	-84.239	-3.830	49.896	1.00	26.96
23489	N	ASN	D	668	-86.197	-2.792	49.819	1.00	26.69
23490	CA	ASN	D	668	-86.852	-3.772	50.677	1.00	26.46
23491	CB	ASN	D	668	-88.185	-3.209	51.165	1.00	27.48
23492	CG	ASN	D	668	-87.996	-2.144	52.216	1.00	29.06
23493	OD1	ASN	D	668	-87.017	-2.174	52.925	1.00	33.18
23494	ND2	ASN	D	668	-88.918	-1.209	52.315	1.00	31.95
23495	C	ASN	D	668	-87.082	-5.133	50.049	1.00	25.84
23496	O	ASN	D	668	-87.401	-6.095	50.757	1.00	25.33
23497	N	PHE	D	669	-86.965	-5.228	48.727	1.00	24.32
23498	CA	PHE	D	669	-87.143	-6.540	48.109	1.00	23.47
23499	CB	PHE	D	669	-87.296	-6.454	46.589	1.00	22.54
23500	CG	PHE	D	669	-88.684	-6.046	46.141	1.00	21.60
23501	CD1	PHE	D	669	-89.139	-4.736	46.343	1.00	19.42

FIGURE 3 QS

A	B	C	D	E	F	G	H	I	J
23502	CE1	PHE	D	669	-90.390	-4.342	45.956	1.00	17.25
23503	CZ	PHE	D	669	-91.226	-5.259	45.316	1.00	20.42
23504	CE2	PHE	D	669	-90.779	-6.576	45.097	1.00	21.06
23505	CD2	PHE	D	669	-89.519	-6.958	45.517	1.00	19.03
23506	C	PHE	D	669	-85.971	-7.442	48.512	1.00	23.35
23507	O	PHE	D	669	-85.915	-8.609	48.140	1.00	22.93
23508	N	LYS	D	670	-85.031	-6.894	49.271	1.00	23.33
23509	CA	LYS	D	670	-83.916	-7.711	49.740	1.00	24.37
23510	CB	LYS	D	670	-82.838	-6.849	50.393	1.00	24.38
23511	CG	LYS	D	670	-82.002	-6.077	49.413	1.00	27.50
23512	CD	LYS	D	670	-80.915	-5.305	50.156	1.00	29.30
23513	CE	LYS	D	670	-80.001	-4.606	49.181	1.00	30.53
23514	NZ	LYS	D	670	-79.113	-3.649	49.894	1.00	33.24
23515	C	LYS	D	670	-84.438	-8.656	50.789	1.00	23.62
23516	O	LYS	D	670	-83.792	-9.608	51.129	1.00	23.80
23517	N	GLN	D	671	-85.614	-8.347	51.309	1.00	23.78
23518	CA	GLN	D	671	-86.205	-9.097	52.402	1.00	23.50
23519	CB	GLN	D	671	-86.968	-8.115	53.317	1.00	22.86
23520	CG	GLN	D	671	-86.097	-6.988	53.845	1.00	20.84
23521	CD	GLN	D	671	-86.860	-5.953	54.653	1.00	24.55
23522	OE1	GLN	D	671	-87.885	-5.420	54.196	1.00	23.77
23523	NE2	GLN	D	671	-86.355	-5.644	55.859	1.00	24.62
23524	C	GLN	D	671	-87.126	-10.233	51.921	1.00	23.80
23525	O	GLN	D	671	-87.734	-10.937	52.735	1.00	23.47
23526	N	VAL	D	672	-87.218	-10.421	50.606	1.00	23.40
23527	CA	VAL	D	672	-88.134	-11.417	50.071	1.00	23.33
23528	CB	VAL	D	672	-89.474	-10.786	49.606	1.00	23.68
23529	CG1	VAL	D	672	-90.161	-10.038	50.732	1.00	22.21
23530	CG2	VAL	D	672	-89.225	-9.834	48.423	1.00	23.11
23531	C	VAL	D	672	-87.559	-12.051	48.850	1.00	23.60
23532	O	VAL	D	672	-86.540	-11.638	48.338	1.00	23.50
23533	N	GLU	D	673	-88.239	-13.080	48.389	1.00	24.36
23534	CA	GLU	D	673	-87.898	-13.736	47.151	1.00	24.88
23535	CB	GLU	D	673	-87.811	-15.243	47.384	1.00	25.87
23536	CG	GLU	D	673	-86.707	-15.589	48.378	1.00	31.11
23537	CD	GLU	D	673	-87.158	-16.595	49.427	1.00	38.23
23538	OE1	GLU	D	673	-87.836	-17.584	49.062	1.00	40.78
23539	OE2	GLU	D	673	-86.823	-16.405	50.622	1.00	42.84
23540	C	GLU	D	673	-89.035	-13.357	46.201	1.00	23.74
23541	O	GLU	D	673	-90.220	-13.564	46.513	1.00	23.16
23542	N	TYR	D	674	-88.668	-12.803	45.051	1.00	23.00
23543	CA	TYR	D	674	-89.626	-12.190	44.129	1.00	22.63
23544	CB	TYR	D	674	-89.299	-10.702	44.023	1.00	22.84
23545	CG	TYR	D	674	-90.225	-9.782	43.251	1.00	21.85
23546	CD1	TYR	D	674	-91.612	-9.768	43.463	1.00	22.71
23547	CE1	TYR	D	674	-92.441	-8.860	42.771	1.00	22.21
23548	CZ	TYR	D	674	-91.850	-7.946	41.874	1.00	22.62
23549	OH	TYR	D	674	-92.605	-7.034	41.173	1.00	23.00
23550	CE2	TYR	D	674	-90.498	-7.951	41.672	1.00	20.57
23551	CD2	TYR	D	674	-89.696	-8.862	42.357	1.00	21.62
23552	C	TYR	D	674	-89.562	-12.775	42.754	1.00	22.26

FIGURE 3 QT

A	B	C	D	E	F	G	H	I	J
23553	O	TYR	D	674	-88.478	-13.015	42.221	1.00	21.96
23554	N	LEU	D	675	-90.735	-12.993	42.177	1.00	22.14
23555	CA	LEU	D	675	-90.822	-13.490	40.818	1.00	22.26
23556	CB	LEU	D	675	-91.456	-14.890	40.762	1.00	22.37
23557	CG	LEU	D	675	-91.857	-15.441	39.383	1.00	21.98
23558	CD1	LEU	D	675	-90.692	-15.466	38.445	1.00	19.90
23559	CD2	LEU	D	675	-92.388	-16.824	39.538	1.00	22.13
23560	C	LEU	D	675	-91.652	-12.466	40.076	1.00	22.02
23561	O	LEU	D	675	-92.773	-12.181	40.469	1.00	21.37
23562	N	LEU	D	676	-91.071	-11.905	39.014	1.00	22.03
23563	CA	LEU	D	676	-91.705	-10.848	38.242	1.00	21.86
23564	CB	LEU	D	676	-90.812	-9.612	38.225	1.00	21.78
23565	CG	LEU	D	676	-91.271	-8.438	37.356	1.00	20.70
23566	CD1	LEU	D	676	-90.127	-7.441	37.272	1.00	20.09
23567	CD2	LEU	D	676	-92.502	-7.791	37.931	1.00	17.32
23568	C	LEU	D	676	-91.934	-11.337	36.823	1.00	21.76
23569	O	LEU	D	676	-90.991	-11.737	36.122	1.00	21.74
23570	N	ILE	D	677	-93.186	-11.292	36.396	1.00	21.49
23571	CA	ILE	D	677	-93.536	-11.854	35.119	1.00	21.70
23572	CB	ILE	D	677	-94.364	-13.092	35.387	1.00	21.59
23573	CG1	ILE	D	677	-93.534	-14.087	36.228	1.00	21.36
23574	CD1	ILE	D	677	-94.300	-15.327	36.633	1.00	19.60
23575	CG2	ILE	D	677	-94.893	-13.706	34.073	1.00	21.51
23576	C	ILE	D	677	-94.317	-10.856	34.275	1.00	22.38
23577	O	ILE	D	677	-95.221	-10.179	34.786	1.00	22.88
23578	N	HIS	D	678	-94.009	-10.782	32.982	1.00	21.54
23579	CA	HIS	D	678	-94.726	-9.840	32.138	1.00	21.73
23580	CB	HIS	D	678	-94.148	-8.434	32.355	1.00	21.41
23581	CG	HIS	D	678	-95.136	-7.339	32.116	1.00	20.87
23582	ND1	HIS	D	678	-95.326	-6.308	33.007	1.00	18.16
23583	CE1	HIS	D	678	-96.270	-5.504	32.547	1.00	20.39
23584	NE2	HIS	D	678	-96.688	-5.973	31.383	1.00	21.36
23585	CD2	HIS	D	678	-96.004	-7.127	31.096	1.00	18.42
23586	C	HIS	D	678	-94.686	-10.199	30.650	1.00	21.66
23587	O	HIS	D	678	-93.671	-10.653	30.156	1.00	21.22
23588	N	GLY	D	679	-95.805	-10.005	29.954	1.00	22.01
23589	CA	GLY	D	679	-95.882	-10.236	28.526	1.00	21.96
23590	C	GLY	D	679	-95.293	-9.048	27.790	1.00	22.74
23591	O	GLY	D	679	-95.645	-7.917	28.089	1.00	23.15
23592	N	THR	D	680	-94.417	-9.278	26.811	1.00	23.16
23593	CA	THR	D	680	-93.796	-8.153	26.109	1.00	23.51
23594	CB	THR	D	680	-92.580	-8.620	25.306	1.00	23.74
23595	OG1	THR	D	680	-93.010	-9.481	24.236	1.00	24.46
23596	CG2	THR	D	680	-91.691	-9.502	26.175	1.00	20.99
23597	C	THR	D	680	-94.746	-7.353	25.212	1.00	24.43
23598	O	THR	D	680	-94.414	-6.251	24.781	1.00	24.65
23599	N	ALA	D	681	-95.936	-7.894	24.960	1.00	24.82
23600	CA	ALA	D	681	-96.895	-7.250	24.087	1.00	25.27
23601	CB	ALA	D	681	-97.225	-8.162	22.879	1.00	25.14
23602	C	ALA	D	681	-98.159	-6.900	24.862	1.00	25.79
23603	O	ALA	D	681	-99.280	-6.920	24.325	1.00	26.71

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 QU**

A	B	C	D	E	F	G	H	I	J
23604	N	ASP	D	682	-97.976	-6.599	26.140	1.00	25.58
23605	CA	ASP	D	682	-99.081	-6.214	26.986	1.00	24.26
23606	CB	ASP	D	682	-98.642	-6.316	28.432	1.00	24.03
23607	CG	ASP	D	682	-99.783	-6.199	29.387	1.00	23.05
23608	OD1	ASP	D	682	-99.778	-6.903	30.430	1.00	23.38
23609	OD2	ASP	D	682	-100.740	-5.433	29.174	1.00	21.88
23610	C	ASP	D	682	-99.418	-4.779	26.622	1.00	24.58
23611	O	ASP	D	682	-98.620	-3.862	26.879	1.00	24.35
23612	N	ASP	D	683	-100.589	-4.593	26.023	1.00	24.45
23613	CA	ASP	D	683	-101.022	-3.300	25.515	1.00	24.69
23614	CB	ASP	D	683	-101.995	-3.509	24.372	1.00	24.67
23615	CG	ASP	D	683	-103.120	-4.386	24.752	1.00	24.79
23616	OD1	ASP	D	683	-102.890	-5.615	24.805	1.00	25.70
23617	OD2	ASP	D	683	-104.267	-3.960	25.029	1.00	24.84
23618	C	ASP	D	683	-101.746	-2.507	26.568	1.00	24.92
23619	O	ASP	D	683	-102.032	-1.309	26.402	1.00	24.30
23620	N	ASN	D	684	-102.060	-3.212	27.647	1.00	24.70
23621	CA	ASN	D	684	-102.800	-2.669	28.750	1.00	23.71
23622	CB	ASN	D	684	-103.704	-3.753	29.307	1.00	23.67
23623	CG	ASN	D	684	-104.729	-3.216	30.259	1.00	23.03
23624	OD1	ASN	D	684	-105.777	-3.811	30.444	1.00	26.22
23625	ND2	ASN	D	684	-104.430	-2.102	30.878	1.00	22.01
23626	C	ASN	D	684	-101.798	-2.178	29.780	1.00	23.32
23627	O	ASN	D	684	-101.558	-0.971	29.901	1.00	22.78
23628	N	VAL	D	685	-101.231	-3.088	30.563	1.00	22.67
23629	CA	VAL	D	685	-100.132	-2.629	31.411	1.00	21.98
23630	CB	VAL	D	685	-100.272	-2.932	32.943	1.00	22.73
23631	CG1	VAL	D	685	-101.492	-3.787	33.262	1.00	21.21
23632	CG2	VAL	D	685	-98.970	-3.382	33.583	1.00	22.59
23633	C	VAL	D	685	-98.850	-2.986	30.716	1.00	21.40
23634	O	VAL	D	685	-98.478	-4.154	30.543	1.00	21.30
23635	N	HIS	D	686	-98.211	-1.932	30.251	1.00	20.86
23636	CA	HIS	D	686	-97.066	-2.037	29.370	1.00	20.94
23637	CB	HIS	D	686	-96.757	-0.652	28.814	1.00	19.78
23638	CG	HIS	D	686	-97.954	-0.024	28.173	1.00	19.37
23639	ND1	HIS	D	686	-98.243	1.321	28.263	1.00	16.50
23640	CE1	HIS	D	686	-99.368	1.567	27.612	1.00	19.38
23641	NE2	HIS	D	686	-99.818	0.430	27.105	1.00	19.51
23642	CD2	HIS	D	686	-98.956	-0.579	27.447	1.00	17.66
23643	C	HIS	D	686	-95.876	-2.723	30.006	1.00	21.02
23644	O	HIS	D	686	-95.616	-2.539	31.179	1.00	21.72
23645	N	PHE	D	687	-95.189	-3.558	29.237	1.00	21.34
23646	CA	PHE	D	687	-93.983	-4.225	29.739	1.00	20.81
23647	CB	PHE	D	687	-93.244	-4.885	28.596	1.00	20.15
23648	CG	PHE	D	687	-92.055	-5.702	29.028	1.00	18.91
23649	CD1	PHE	D	687	-92.217	-7.006	29.439	1.00	17.67
23650	CE1	PHE	D	687	-91.120	-7.771	29.831	1.00	17.81
23651	C2	PHE	D	687	-89.870	-7.232	29.792	1.00	16.78
23652	CE2	PHE	D	687	-89.687	-5.931	29.380	1.00	18.33
23653	CD2	PHE	D	687	-90.776	-5.168	28.992	1.00	16.92
23654	C	PHE	D	687	-93.085	-3.212	30.435	1.00	21.54

FIGURE 3 QV

A	B	C	D	E	F	G	H	I	J
23655	O	PHE	D	687	-92.386	-3.546	31.398	1.00	22.37
23656	N	GLN	D	688	-93.123	-1.969	29.957	1.00	21.62
23657	CA	GLN	D	688	-92.382	-0.853	30.573	1.00	21.99
23658	CB	GLN	D	688	-92.986	0.489	30.082	1.00	21.49
23659	CG	GLN	D	688	-92.732	1.696	30.977	1.00	21.34
23660	CD	GLN	D	688	-93.623	2.891	30.629	1.00	20.42
23661	OE1	GLN	D	688	-94.790	2.715	30.353	1.00	21.30
23662	NE2	GLN	D	688	-93.062	4.094	30.637	1.00	18.03
23663	C	GLN	D	688	-92.478	-0.932	32.088	1.00	21.77
23664	O	GLN	D	688	-91.512	-0.778	32.831	1.00	22.49
23665	N	GLN	D	689	-93.687	-1.173	32.537	1.00	21.98
23666	CA	GLN	D	689	-93.997	-1.200	33.953	1.00	22.02
23667	CB	GLN	D	689	-95.476	-1.525	34.049	1.00	21.84
23668	CG	GLN	D	689	-96.174	-1.035	35.257	1.00	25.01
23669	CD	GLN	D	689	-97.016	0.225	35.060	1.00	23.27
23670	OE1	GLN	D	689	-96.955	1.084	35.896	1.00	26.17
23671	NE2	GLN	D	689	-97.831	0.299	34.008	1.00	22.99
23672	C	GLN	D	689	-93.082	-2.182	34.720	1.00	22.00
23673	O	GLN	D	689	-92.516	-1.843	35.763	1.00	22.48
23674	N	SER	D	690	-92.908	-3.398	34.203	1.00	21.84
23675	CA	SER	D	690	-92.023	-4.356	34.849	1.00	21.13
23676	CB	SER	D	690	-92.373	-5.796	34.438	1.00	21.43
23677	OG	SER	D	690	-93.582	-6.212	35.034	1.00	21.44
23678	C	SER	D	690	-90.574	-4.068	34.496	1.00	20.96
23679	O	SER	D	690	-89.685	-4.366	35.275	1.00	21.48
23680	N	ALA	D	691	-90.328	-3.507	33.312	1.00	20.62
23681	CA	ALA	D	691	-88.970	-3.153	32.913	1.00	20.80
23682	CB	ALA	D	691	-88.936	-2.595	31.467	1.00	20.67
23683	C	ALA	D	691	-88.351	-2.152	33.884	1.00	20.77
23684	O	ALA	D	691	-87.137	-2.145	34.095	1.00	21.27
23685	N	GLN	D	692	-89.183	-1.296	34.457	1.00	20.70
23686	CA	GLN	D	692	-88.725	-0.311	35.438	1.00	20.86
23687	CB	GLN	D	692	-89.684	0.888	35.491	1.00	21.00
23688	CG	GLN	D	692	-89.700	1.747	34.223	1.00	22.12
23689	CD	GLN	D	692	-88.435	2.575	34.012	1.00	23.01
23690	OE1	GLN	D	692	-87.472	2.468	34.770	1.00	26.51
23691	NE2	GLN	D	692	-88.439	3.405	32.976	1.00	24.59
23692	C	GLN	D	692	-88.592	-0.944	36.822	1.00	20.78
23693	O	GLN	D	692	-87.705	-0.588	37.583	1.00	20.62
23694	N	ILE	D	693	-89.467	-1.888	37.158	1.00	20.68
23695	CA	ILE	D	693	-89.302	-2.574	38.445	1.00	20.87
23696	CB	ILE	D	693	-90.428	-3.603	38.736	1.00	20.42
23697	CG1	ILE	D	693	-91.712	-2.880	39.093	1.00	19.89
23698	CD1	ILE	D	693	-92.905	-3.825	39.351	1.00	16.39
23699	CG2	ILE	D	693	-90.035	-4.495	39.924	1.00	20.06
23700	C	ILE	D	693	-87.976	-3.285	38.476	1.00	20.52
23701	O	ILE	D	693	-87.219	-3.168	39.422	1.00	21.24
23702	N	SER	D	694	-87.693	-4.037	37.422	1.00	21.10
23703	CA	SER	D	694	-86.468	-4.818	37.370	1.00	20.77
23704	CB	SER	D	694	-86.467	-5.707	36.129	1.00	21.03
23705	OG	SER	D	694	-86.308	-4.942	34.945	1.00	21.23

FIGURE 3 QW

A	B	C	D	E	F	G	H	I	J
23706	C	SER	D	694	-85.218	-3.962	37.384	1.00	20.65
23707	O	SER	D	694	-84.209	-4.374	37.913	1.00	20.94
23708	N	LYS	D	695	-85.267	-2.792	36.754	1.00	20.75
23709	CA	LYS	D	695	-84.109	-1.912	36.703	1.00	20.30
23710	CB	LYS	D	695	-84.316	-0.806	35.647	1.00	20.51
23711	CG	LYS	D	695	-83.226	0.253	35.635	1.00	19.10
23712	CD	LYS	D	695	-83.052	0.919	34.260	1.00	18.50
23713	CE	LYS	D	695	-84.301	1.678	33.807	1.00	19.63
23714	NZ	LYS	D	695	-84.671	2.888	34.658	1.00	23.49
23715	C	LYS	D	695	-83.891	-1.308	38.078	1.00	20.61
23716	O	LYS	D	695	-82.785	-1.113	38.509	1.00	20.27
23717	N	ALA	D	696	-84.957	-1.016	38.788	1.00	21.51
23718	CA	ALA	D	696	-84.772	-0.475	40.119	1.00	23.18
23719	CB	ALA	D	696	-86.082	0.086	40.647	1.00	22.96
23720	C	ALA	D	696	-84.196	-1.546	41.064	1.00	24.04
23721	O	ALA	D	696	-83.400	-1.233	41.946	1.00	25.62
23722	N	LEU	D	697	-84.584	-2.801	40.877	1.00	24.70
23723	CA	LEU	D	697	-84.048	-3.893	41.711	1.00	25.61
23724	CB	LEU	D	697	-84.843	-5.186	41.515	1.00	25.69
23725	CG	LEU	D	697	-86.288	-5.178	42.048	1.00	26.26
23726	CD1	LEU	D	697	-86.968	-6.530	41.876	1.00	26.82
23727	CD2	LEU	D	697	-86.304	-4.787	43.504	1.00	28.62
23728	C	LEU	D	697	-82.583	-4.140	41.404	1.00	25.90
23729	O	LEU	D	697	-81.772	-4.330	42.309	1.00	26.11
23730	N	VAL	D	698	-82.237	-4.134	40.121	1.00	26.07
23731	CA	VAL	D	698	-80.851	-4.304	39.735	1.00	25.49
23732	CB	VAL	D	698	-80.704	-4.237	38.207	1.00	25.71
23733	CG1	VAL	D	698	-79.244	-4.082	37.820	1.00	23.66
23734	CG2	VAL	D	698	-81.313	-5.488	37.555	1.00	24.81
23735	C	VAL	D	698	-80.042	-3.171	40.336	1.00	26.30
23736	O	VAL	D	698	-78.927	-3.355	40.865	1.00	26.31
23737	N	ASP	D	699	-80.606	-1.974	40.255	1.00	26.42
23738	CA	ASP	D	699	-79.901	-0.815	40.735	1.00	27.19
23739	CB	ASP	D	699	-80.598	0.455	40.281	1.00	27.83
23740	CG	ASP	D	699	-80.334	0.748	38.820	1.00	31.61
23741	OD1	ASP	D	699	-80.873	1.747	38.312	1.00	34.02
23742	OD2	ASP	D	699	-79.614	0.011	38.094	1.00	35.99
23743	C	ASP	D	699	-79.538	-0.802	42.231	1.00	26.39
23744	O	ASP	D	699	-78.557	-0.188	42.596	1.00	26.84
23745	N	VAL	D	700	-80.302	-1.480	43.083	1.00	25.93
23746	CA	VAL	D	700	-79.959	-1.529	44.515	1.00	25.70
23747	CB	VAL	D	700	-81.141	-1.142	45.464	1.00	25.71
23748	CG1	VAL	D	700	-81.578	0.292	45.252	1.00	24.57
23749	CG2	VAL	D	700	-82.323	-2.091	45.296	1.00	26.35
23750	C	VAL	D	700	-79.419	-2.902	44.905	1.00	25.77
23751	O	VAL	D	700	-79.240	-3.190	46.069	1.00	25.50
23752	N	GLY	D	701	-79.180	-3.753	43.915	1.00	26.22
23753	CA	GLY	D	701	-78.559	-5.044	44.146	1.00	26.35
23754	C	GLY	D	701	-79.447	-6.124	44.743	1.00	26.80
23755	O	GLY	D	701	-78.981	-6.948	45.535	1.00	26.86
23756	N	VAL	D	702	-80.727	-6.127	44.413	1.00	26.80

FIGURE 3 QX

A	B	C	D	E	F	G	H	I	J
23757	CA	VAL	D	702	-81.542	-7.235	44.879	1.00	27.14
23758	CB	VAL	D	702	-82.865	-6.825	45.543	1.00	27.17
23759	CG1	VAL	D	702	-82.988	-5.322	45.630	1.00	27.53
23760	CG2	VAL	D	702	-84.064	-7.518	44.885	1.00	27.60
23761	C	VAL	D	702	-81.731	-8.279	43.806	1.00	26.77
23762	O	VAL	D	702	-82.007	-7.965	42.649	1.00	27.38
23763	N	ASP	D	703	-81.519	-9.522	44.204	1.00	26.53
23764	CA	ASP	D	703	-81.709	-10.650	43.329	1.00	27.21
23765	CB	ASP	D	703	-80.837	-11.838	43.754	1.00	27.73
23766	CG	ASP	D	703	-80.774	-12.911	42.670	1.00	28.68
23767	OD1	ASP	D	703	-81.055	-14.081	42.993	1.00	30.69
23768	OD2	ASP	D	703	-80.499	-12.661	41.465	1.00	25.48
23769	C	ASP	D	703	-83.169	-11.052	43.358	1.00	26.90
23770	O	ASP	D	703	-83.814	-11.018	44.407	1.00	27.76
23771	N	PHE	D	704	-83.688	-11.420	42.199	1.00	26.19
23772	CA	PHE	D	704	-85.078	-11.811	42.067	1.00	25.30
23773	CB	PHE	D	704	-85.953	-10.575	41.857	1.00	25.19
23774	CG	PHE	D	704	-85.616	-9.791	40.615	1.00	24.20
23775	CD1	PHE	D	704	-86.372	-9.940	39.462	1.00	23.72
23776	CE1	PHE	D	704	-86.070	-9.213	38.310	1.00	24.12
23777	CZ	PHE	D	704	-85.002	-8.309	38.306	1.00	21.64
23778	CE2	PHE	D	704	-84.252	-8.150	39.435	1.00	22.32
23779	CD2	PHE	D	704	-84.556	-8.894	40.600	1.00	23.35
23780	C	PHE	D	704	-85.166	-12.718	40.866	1.00	25.50
23781	O	PHE	D	704	-84.166	-12.925	40.160	1.00	25.56
23782	N	GLN	D	705	-86.348	-13.278	40.634	1.00	25.49
23783	CA	GLN	D	705	-86.545	-14.123	39.478	1.00	25.80
23784	CB	GLN	D	705	-87.227	-15.434	39.868	1.00	26.41
23785	CG	GLN	D	705	-86.449	-16.305	40.838	1.00	31.23
23786	CD	GLN	D	705	-84.996	-16.436	40.468	1.00	37.91
23787	OE1	GLN	D	705	-84.110	-16.189	41.296	1.00	43.51
23788	NE2	GLN	D	705	-84.736	-16.806	39.234	1.00	39.39
23789	C	GLN	D	705	-87.417	-13.375	38.472	1.00	24.92
23790	O	GLN	D	705	-88.367	-12.701	38.858	1.00	24.88
23791	N	ALA	D	706	-87.095	-13.494	37.192	1.00	23.71
23792	CA	ALA	D	706	-87.899	-12.868	36.155	1.00	23.59
23793	CB	ALA	D	706	-87.135	-11.717	35.509	1.00	22.50
23794	C	ALA	D	706	-88.372	-13.858	35.067	1.00	23.75
23795	O	ALA	D	706	-87.830	-14.963	34.896	1.00	23.51
23796	N	MET	D	707	-89.393	-13.443	34.336	1.00	23.38
23797	CA	MET	D	707	-89.810	-14.180	33.164	1.00	23.04
23798	CB	MET	D	707	-90.678	-15.378	33.533	1.00	23.25
23799	CG	MET	D	707	-91.241	-16.082	32.322	1.00	24.57
23800	SD	MET	D	707	-89.962	-16.899	31.331	1.00	26.76
23801	CE	MET	D	707	-89.257	-18.031	32.519	1.00	22.19
23802	C	MET	D	707	-90.606	-13.275	32.259	1.00	22.67
23803	O	MET	D	707	-91.645	-12.765	32.654	1.00	22.28
23804	N	TRP	D	708	-90.100	-13.059	31.050	1.00	22.64
23805	CA	TRP	D	708	-90.846	-12.327	30.044	1.00	22.61
23806	CB	TRP	D	708	-89.895	-11.449	29.221	1.00	21.99
23807	CG	TRP	D	708	-89.120	-12.216	28.185	1.00	22.43

FIGURE 3 QY

A	B	C	D	E	F	G	H	I	J
23808	CD1	TRP	D	708	-89.596	-12.706	26.987	1.00	24.21
23809	NE1	TRP	D	708	-88.599	-13.382	26.324	1.00	23.29
23810	CE2	TRP	D	708	-87.451	-13.313	27.072	1.00	23.65
23811	CD2	TRP	D	708	-87.746	-12.594	28.245	1.00	21.39
23812	CE3	TRP	D	708	-86.736	-12.429	29.190	1.00	21.74
23813	CZ3	TRP	D	708	-85.491	-12.934	28.929	1.00	22.63
23814	CH2	TRP	D	708	-85.228	-13.637	27.764	1.00	23.46
23815	CZ2	TRP	D	708	-86.190	-13.839	26.823	1.00	23.70
23816	C	TRP	D	708	-91.550	-13.377	29.151	1.00	22.38
23817	O	TRP	D	708	-91.024	-14.476	28.951	1.00	23.23
23818	N	TYR	D	709	-92.724	-13.051	28.643	1.00	21.87
23819	CA	TYR	D	709	-93.463	-13.930	27.722	1.00	22.29
23820	CB	TYR	D	709	-94.837	-14.327	28.265	1.00	21.63
23821	CG	TYR	D	709	-94.689	-15.448	29.240	1.00	23.13
23822	CD1	TYR	D	709	-94.370	-16.730	28.809	1.00	23.03
23823	CE1	TYR	D	709	-94.181	-17.766	29.719	1.00	24.34
23824	CZ	TYR	D	709	-94.292	-17.511	31.064	1.00	24.60
23825	OH	TYR	D	709	-94.110	-18.520	31.982	1.00	23.02
23826	CE2	TYR	D	709	-94.590	-16.241	31.502	1.00	24.89
23827	CD2	TYR	D	709	-94.774	-15.219	30.596	1.00	23.35
23828	C	TYR	D	709	-93.597	-13.210	26.406	1.00	22.46
23829	O	TYR	D	709	-94.368	-12.263	26.268	1.00	22.19
23830	N	THR	D	710	-92.755	-13.612	25.478	1.00	23.10
23831	CA	THR	D	710	-92.679	-12.985	24.181	1.00	24.34
23832	CB	THR	D	710	-91.715	-13.792	23.325	1.00	24.78
23833	OG1	THR	D	710	-90.418	-13.773	23.935	1.00	25.52
23834	CG2	THR	D	710	-91.523	-13.116	21.986	1.00	24.41
23835	C	THR	D	710	-94.007	-12.947	23.460	1.00	24.60
23836	O	THR	D	710	-94.601	-14.000	23.195	1.00	24.62
23837	N	ASP	D	711	-94.443	-11.733	23.132	1.00	25.02
23838	CA	ASP	D	711	-95.653	-11.486	22.346	1.00	25.41
23839	CB	ASP	D	711	-95.652	-12.268	21.029	1.00	25.30
23840	CG	ASP	D	711	-94.688	-11.684	20.013	1.00	27.89
23841	OD1	ASP	D	711	-94.501	-12.313	18.929	1.00	30.31
23842	OD2	ASP	D	711	-94.074	-10.600	20.202	1.00	27.02
23843	C	ASP	D	711	-96.957	-11.705	23.069	1.00	25.14
23844	O	ASP	D	711	-98.024	-11.540	22.468	1.00	24.79
23845	N	GLU	D	712	-96.893	-12.086	24.343	1.00	24.54
23846	CA	GLU	D	712	-98.129	-12.243	25.092	1.00	24.67
23847	CB	GLU	D	712	-97.945	-13.177	26.291	1.00	24.69
23848	CG	GLU	D	712	-97.697	-14.640	25.904	1.00	26.15
23849	CD	GLU	D	712	-98.864	-15.265	25.148	1.00	28.70
23850	OE1	GLU	D	712	-98.685	-15.605	23.955	1.00	32.99
23851	OE2	GLU	D	712	-99.954	-15.436	25.729	1.00	28.16
23852	C	GLU	D	712	-98.662	-10.871	25.525	1.00	24.90
23853	O	GLU	D	712	-97.894	-9.908	25.710	1.00	24.40
23854	N	ASP	D	713	-99.977	-10.766	25.677	1.00	25.38
23855	CA	ASP	D	713	-100.541	-9.490	26.086	1.00	26.35
23856	CB	ASP	D	713	-101.709	-9.066	25.204	1.00	26.45
23857	CG	ASP	D	713	-102.948	-9.944	25.385	1.00	28.52
23858	OD1	ASP	D	713	-103.943	-9.689	24.664	1.00	32.19



FIGURE 3 QZ

A	B	C	D	E	F	G	H	I	J
23859	OD2	ASP	D	713	-103.044	-10.866	26.221	1.00	27.60
23860	C	ASP	D	713	-100.891	-9.553	27.562	1.00	25.89
23861	O	ASP	D	713	-100.273	-10.324	28.296	1.00	26.04
23862	N	HIS	D	714	-101.868	-8.774	28.008	1.00	25.24
23863	CA	HIS	D	714	-102.177	-8.773	29.429	1.00	25.39
23864	CB	HIS	D	714	-103.164	-7.671	29.790	1.00	24.41
23865	CG	HIS	D	714	-103.016	-7.192	31.193	1.00	24.80
23866	ND1	HIS	D	714	-101.806	-6.777	31.708	1.00	24.09
23867	CE1	HIS	D	714	-101.964	-6.433	32.973	1.00	22.22
23868	NE2	HIS	D	714	-103.232	-6.603	33.296	1.00	23.96
23869	CD2	HIS	D	714	-103.911	-7.090	32.206	1.00	25.30
23870	C	HIS	D	714	-102.679	-10.104	29.948	1.00	25.99
23871	O	HIS	D	714	-102.518	-10.408	31.123	1.00	26.72
23872	N	GLY	D	715	-103.277	-10.911	29.076	1.00	26.76
23873	CA	GLY	D	715	-103.860	-12.168	29.492	1.00	27.06
23874	C	GLY	D	715	-102.894	-13.334	29.578	1.00	28.15
23875	O	GLY	D	715	-103.189	-14.317	30.269	1.00	28.12
23876	N	ILE	D	716	-101.738	-13.226	28.916	1.00	28.62
23877	CA	ILE	D	716	-100.816	-14.350	28.828	1.00	29.13
23878	CB	ILE	D	716	-99.971	-14.457	30.096	1.00	29.10
23879	CG1	ILE	D	716	-99.493	-13.050	30.505	1.00	28.03
23880	CD1	ILE	D	716	-98.224	-13.034	31.308	1.00	26.15
23881	CG2	ILE	D	716	-98.794	-15.432	29.879	1.00	26.30
23882	C	ILE	D	716	-101.699	-15.567	28.663	1.00	30.53
23883	O	ILE	D	716	-101.572	-16.553	29.377	1.00	30.93
23884	N	ALA	D	717	-102.581	-15.488	27.676	1.00	31.90
23885	CA	ALA	D	717	-103.652	-16.452	27.527	1.00	32.82
23886	CB	ALA	D	717	-104.971	-15.701	27.359	1.00	32.77
23887	C	ALA	D	717	-103.468	-17.466	26.411	1.00	33.53
23888	O	ALA	D	717	-104.297	-18.345	26.225	1.00	34.26
23889	N	SER	D	718	-102.414	-17.337	25.631	1.00	34.51
23890	CA	SER	D	718	-102.149	-18.369	24.648	1.00	34.89
23891	CB	SER	D	718	-100.813	-18.117	23.966	1.00	35.09
23892	OG	SER	D	718	-100.861	-16.872	23.278	1.00	38.42
23893	C	SER	D	718	-102.138	-19.699	25.406	1.00	34.66
23894	O	SER	D	718	-101.737	-19.773	26.560	1.00	34.70
23895	N	SER	D	719	-102.597	-20.754	24.763	1.00	34.36
23896	CA	SER	D	719	-102.646	-22.033	25.429	1.00	33.70
23897	CB	SER	D	719	-103.188	-23.106	24.485	1.00	33.97
23898	OG	SER	D	719	-103.222	-24.340	25.165	1.00	35.36
23899	C	SER	D	719	-101.266	-22.419	25.974	1.00	32.72
23900	O	SER	D	719	-101.151	-22.841	27.119	1.00	32.25
23901	N	THR	D	720	-100.218	-22.252	25.175	1.00	31.69
23902	CA	THR	D	720	-98.884	-22.618	25.653	1.00	31.34
23903	CB	THR	D	720	-97.878	-22.741	24.491	1.00	31.31
23904	OG1	THR	D	720	-97.765	-21.487	23.807	1.00	30.08
23905	CG2	THR	D	720	-98.408	-23.750	23.417	1.00	31.67
23906	C	THR	D	720	-98.321	-21.702	26.751	1.00	31.24
23907	O	THR	D	720	-97.699	-22.181	27.701	1.00	31.39
23908	N	ALA	D	721	-98.542	-20.397	26.632	1.00	30.79
23909	CA	ALA	D	721	-97.983	-19.459	27.599	1.00	30.63

FIGURE 3 RA

A	B	C	D	E	F	G	H	I	J
23910	CB	ALA	D	721	-98.069	-18.010	27.084	1.00	30.07
23911	C	ALA	D	721	-98.715	-19.615	28.901	1.00	30.47
23912	O	ALA	D	721	-98.129	-19.542	29.969	1.00	30.41
23913	N	HIS	D	722	-100.011	-19.859	28.800	1.00	30.82
23914	CA	HIS	D	722	-100.831	-20.075	29.982	1.00	31.21
23915	CB	HIS	D	722	-102.294	-20.280	29.581	1.00	31.42
23916	CG	HIS	D	722	-103.150	-20.822	30.680	1.00	32.76
23917	ND1	HIS	D	722	-103.602	-20.045	31.721	1.00	34.01
23918	CE1	HIS	D	722	-104.335	-20.781	32.537	1.00	34.22
23919	NE2	HIS	D	722	-104.363	-22.014	32.070	1.00	35.08
23920	CD2	HIS	D	722	-103.629	-22.068	30.908	1.00	34.44
23921	C	HIS	D	722	-100.311	-21.270	30.771	1.00	31.02
23922	O	HIS	D	722	-100.170	-21.216	32.002	1.00	31.48
23923	N	GLN	D	723	-100.019	-22.360	30.077	1.00	30.29
23924	CA	GLN	D	723	-99.473	-23.517	30.769	1.00	29.72
23925	CB	GLN	D	723	-99.444	-24.737	29.836	1.00	29.79
23926	CG	GLN	D	723	-100.808	-25.099	29.260	1.00	31.78
23927	CD	GLN	D	723	-100.717	-26.195	28.215	1.00	34.32
23928	OE1	GLN	D	723	-100.201	-27.290	28.495	1.00	36.17
23929	NE2	GLN	D	723	-101.196	-25.906	27.010	1.00	31.59
23930	C	GLN	D	723	-98.063	-23.233	31.296	1.00	28.87
23931	O	GLN	D	723	-97.680	-23.717	32.361	1.00	28.62
23932	N	HIS	D	724	-97.283	-22.482	30.531	1.00	28.25
23933	CA	HIS	D	724	-95.901	-22.186	30.909	1.00	28.61
23934	CB	HIS	D	724	-95.137	-21.579	29.730	1.00	28.69
23935	CG	HIS	D	724	-93.650	-21.580	29.904	1.00	29.79
23936	ND1	HIS	D	724	-92.995	-20.699	30.738	1.00	29.17
23937	CE1	HIS	D	724	-91.693	-20.935	30.687	1.00	29.96
23938	NE2	HIS	D	724	-91.482	-21.936	29.850	1.00	29.22
23939	CD2	HIS	D	724	-92.688	-22.354	29.344	1.00	30.80
23940	C	HIS	D	724	-95.776	-21.298	32.152	1.00	28.58
23941	O	HIS	D	724	-94.914	-21.534	32.987	1.00	28.75
23942	N	ILE	D	725	-96.655	-20.304	32.293	1.00	28.58
23943	CA	ILE	D	725	-96.589	-19.408	33.439	1.00	28.30
23944	CB	ILE	D	725	-97.407	-18.092	33.204	1.00	28.22
23945	CG1	ILE	D	725	-97.166	-17.107	34.359	1.00	26.66
23946	CD1	ILE	D	725	-97.987	-15.800	34.259	1.00	23.69
23947	CG2	ILE	D	725	-98.897	-18.358	33.041	1.00	26.98
23948	C	ILE	D	725	-96.989	-20.095	34.739	1.00	28.65
23949	O	ILE	D	725	-96.267	-20.017	35.746	1.00	28.07
23950	N	TYR	D	726	-98.124	-20.798	34.723	1.00	28.74
23951	CA	TYR	D	726	-98.563	-21.472	35.933	1.00	28.23
23952	CB	TYR	D	726	-99.999	-21.975	35.803	1.00	28.51
23953	CG	TYR	D	726	-101.012	-20.863	35.981	1.00	28.99
23954	CD1	TYR	D	726	-101.532	-20.187	34.888	1.00	28.65
23955	CE1	TYR	D	726	-102.433	-19.151	35.048	1.00	27.20
23956	CZ	TYR	D	726	-102.819	-18.786	36.318	1.00	27.84
23957	OH	TYR	D	726	-103.729	-17.770	36.494	1.00	26.17
23958	CE2	TYR	D	726	-102.326	-19.456	37.420	1.00	27.71
23959	CD2	TYR	D	726	-101.417	-20.470	37.250	1.00	28.75
23960	C	TYR	D	726	-97.574	-22.560	36.336	1.00	28.21

FIGURE 3 RB

A	B	C	D	E	F	G	H	I	J
23961	O	TYR	D	726	-97.392	-22.827	37.521	1.00	28.14
23962	N	THR	D	727	-96.908	-23.155	35.352	1.00	28.24
23963	CA	THR	D	727	-95.906	-24.182	35.612	1.00	28.34
23964	CB	THR	D	727	-95.452	-24.871	34.283	1.00	28.52
23965	OG1	THR	D	727	-96.575	-25.509	33.654	1.00	30.62
23966	CG2	THR	D	727	-94.527	-26.045	34.558	1.00	27.79
23967	C	THR	D	727	-94.723	-23.522	36.307	1.00	28.16
23968	O	THR	D	727	-94.266	-23.982	37.344	1.00	28.00
23969	N	HIS	D	728	-94.249	-22.417	35.746	1.00	28.34
23970	CA	HIS	D	728	-93.129	-21.693	36.342	1.00	27.90
23971	CB	HIS	D	728	-92.708	-20.536	35.456	1.00	27.93
23972	CG	HIS	D	728	-91.256	-20.190	35.569	1.00	28.71
23973	ND1	HIS	D	728	-90.807	-19.043	36.190	1.00	26.94
23974	CE1	HIS	D	728	-89.492	-18.995	36.118	1.00	26.25
23975	NE2	HIS	D	728	-89.069	-20.066	35.471	1.00	27.15
23976	CD2	HIS	D	728	-90.153	-20.826	35.114	1.00	27.68
23977	C	HIS	D	728	-93.513	-21.177	37.709	1.00	27.60
23978	O	HIS	D	728	-92.732	-21.260	38.642	1.00	27.81
23979	N	MET	D	729	-94.736	-20.680	37.854	1.00	27.20
23980	CA	MET	D	729	-95.142	-20.148	39.151	1.00	27.30
23981	CB	MET	D	729	-96.461	-19.383	39.044	1.00	27.41
23982	CG	MET	D	729	-96.356	-18.089	38.223	1.00	27.80
23983	SD	MET	D	729	-97.799	-17.045	38.474	1.00	31.32
23984	CE	MET	D	729	-98.988	-17.959	37.603	1.00	28.58
23985	C	MET	D	729	-95.234	-21.217	40.227	1.00	27.58
23986	O	MET	D	729	-94.988	-20.946	41.415	1.00	26.14
23987	N	SER	D	730	-95.599	-22.426	39.790	1.00	28.27
23988	CA	SER	D	730	-95.763	-23.574	40.675	1.00	29.26
23989	CB	SER	D	730	-96.461	-24.733	39.940	1.00	29.36
23990	OG	SER	D	730	-97.801	-24.388	39.604	1.00	30.37
23991	C	SER	D	730	-94.415	-24.006	41.220	1.00	29.27
23992	O	SER	D	730	-94.272	-24.254	42.412	1.00	29.22
23993	N	HIS	D	731	-93.429	-24.070	40.341	1.00	30.11
23994	CA	HIS	D	731	-92.050	-24.371	40.740	1.00	31.48
23995	CB	HIS	D	731	-91.110	-24.302	39.527	1.00	31.75
23996	CG	HIS	D	731	-91.168	-25.502	38.635	1.00	36.02
23997	ND1	HIS	D	731	-91.333	-26.785	39.120	1.00	40.04
23998	CE1	HIS	D	731	-91.335	-27.636	38.108	1.00	41.67
23999	NE2	HIS	D	731	-91.175	-26.955	36.986	1.00	39.65
24000	CD2	HIS	D	731	-91.063	-25.619	37.288	1.00	38.27
24001	C	HIS	D	731	-91.555	-23.364	41.769	1.00	31.01
24002	O	HIS	D	731	-90.973	-23.743	42.788	1.00	31.43
24003	N	PHE	D	732	-91.796	-22.077	41.498	1.00	30.94
24004	CA	PHE	D	732	-91.300	-20.990	42.351	1.00	30.28
24005	CB	PHE	D	732	-91.692	-19.624	41.791	1.00	29.78
24006	CG	PHE	D	732	-91.248	-18.468	42.645	1.00	27.75
24007	CD1	PHE	D	732	-89.946	-17.998	42.572	1.00	27.19
24008	CE1	PHE	D	732	-89.533	-16.942	43.358	1.00	28.30
24009	CZ	PHE	D	732	-90.446	-16.323	44.213	1.00	28.28
24010	CE2	PHE	D	732	-91.744	-16.781	44.279	1.00	25.45
24011	CD2	PHE	D	732	-92.131	-17.853	43.509	1.00	25.81

FIGURE 3 RC

A	B	C	D	E	F	G	H	I	J
24012	C	PHE	D	732	-91.851	-21.104	43.732	1.00	30.64
24013	O	PHE	D	732	-91.116	-20.985	44.717	1.00	30.47
24014	N	ILE	D	733	-93.158	-21.329	43.786	1.00	31.23
24015	CA	ILE	D	733	-93.880	-21.476	45.034	1.00	32.24
24016	CB	ILE	D	733	-95.393	-21.564	44.756	1.00	32.28
24017	CG1	ILE	D	733	-95.881	-20.241	44.184	1.00	33.24
24018	CD1	ILE	D	733	-95.741	-19.063	45.155	1.00	34.28
24019	CG2	ILE	D	733	-96.178	-21.875	46.030	1.00	31.60
24020	C	ILE	D	733	-93.393	-22.700	45.795	1.00	33.05
24021	O	ILE	D	733	-93.043	-22.584	46.960	1.00	33.10
24022	N	LYS	D	734	-93.366	-23.859	45.127	1.00	34.12
24023	CA	LYS	D	734	-92.894	-25.111	45.732	1.00	35.44
24024	CB	LYS	D	734	-92.634	-26.209	44.671	1.00	35.53
24025	CG	LYS	D	734	-93.742	-26.483	43.666	1.00	37.56
24026	CD	LYS	D	734	-94.685	-27.595	44.080	1.00	40.97
24027	CE	LYS	D	734	-94.023	-28.977	43.982	1.00	41.85
24028	NZ	LYS	D	734	-95.014	-30.045	43.641	1.00	42.68
24029	C	LYS	D	734	-91.569	-24.850	46.411	1.00	35.69
24030	O	LYS	D	734	-91.380	-25.172	47.579	1.00	35.50
24031	N	GLN	D	735	-90.649	-24.283	45.636	1.00	36.31
24032	CA	GLN	D	735	-89.291	-23.998	46.081	1.00	37.37
24033	CB	GLN	D	735	-88.466	-23.428	44.915	1.00	38.00
24034	CG	GLN	D	735	-87.112	-24.133	44.683	1.00	42.23
24035	CD	GLN	D	735	-86.882	-24.498	43.214	1.00	46.36
24036	OE1	GLN	D	735	-87.676	-24.120	42.353	1.00	49.07
24037	NE2	GLN	D	735	-85.804	-25.243	42.930	1.00	48.29
24038	C	GLN	D	735	-89.287	-23.048	47.280	1.00	37.22
24039	O	GLN	D	735	-88.546	-23.262	48.235	1.00	37.42
24040	N	CYS	D	736	-90.138	-22.027	47.249	1.00	36.65
24041	CA	CYS	D	736	-90.209	-21.069	48.348	1.00	36.80
24042	CB	CYS	D	736	-91.071	-19.857	47.957	1.00	36.66
24043	SG	CYS	D	736	-91.706	-18.832	49.313	1.00	38.36
24044	C	CYS	D	736	-90.746	-21.720	49.617	1.00	36.81
24045	O	CYS	D	736	-90.331	-21.367	50.731	1.00	36.68
24046	N	PHE	D	737	-91.663	-22.669	49.436	1.00	36.64
24047	CA	PHE	D	737	-92.305	-23.362	50.541	1.00	36.62
24048	CB	PHE	D	737	-93.752	-23.694	50.182	1.00	35.97
24049	CG	PHE	D	737	-94.676	-22.524	50.260	1.00	34.35
24050	CD1	PHE	D	737	-94.253	-21.335	50.826	1.00	30.83
24051	CE1	PHE	D	737	-95.095	-20.256	50.904	1.00	28.86
24052	CZ	PHE	D	737	-96.377	-20.344	50.422	1.00	29.88
24053	CE2	PHE	D	737	-96.820	-21.523	49.838	1.00	30.99
24054	CD2	PHE	D	737	-95.968	-22.604	49.754	1.00	31.96
24055	C	PHE	D	737	-91.582	-24.653	50.887	1.00	37.46
24056	O	PHE	D	737	-91.996	-25.381	51.782	1.00	37.47
24057	N	SER	D	738	-90.513	-24.949	50.165	1.00	38.74
24058	CA	SER	D	738	-89.768	-26.170	50.419	1.00	40.18
24059	CB	SER	D	738	-89.240	-26.211	51.858	1.00	39.94
24060	OG	SER	D	738	-88.089	-25.409	51.986	1.00	39.67
24061	C	SER	D	738	-90.633	-27.390	50.153	1.00	41.31
24062	O	SER	D	738	-90.620	-28.342	50.937	1.00	41.36

FIGURE 3 RD

A	B	C	D	E	F	G	H	I	J
24063	N	LEU	D	739	-91.380	-27.352	49.051	1.00	42.72
24064	CA	LEU	D	739	-92.192	-28.484	48.624	1.00	44.17
24065	CB	LEU	D	739	-93.565	-28.034	48.154	1.00	43.93
24066	CG	LEU	D	739	-94.462	-27.445	49.231	1.00	44.34
24067	CD1	LEU	D	739	-95.808	-27.149	48.641	1.00	44.64
24068	CD2	LEU	D	739	-94.583	-28.407	50.404	1.00	45.57
24069	C	LEU	D	739	-91.507	-29.224	47.495	1.00	45.39
24070	O	LEU	D	739	-91.217	-28.656	46.445	1.00	45.92
24071	N	PRO	D	740	-91.231	-30.498	47.716	1.00	46.58
24072	CA	PRO	D	740	-90.596	-31.337	46.698	1.00	47.17
24073	CB	PRO	D	740	-90.074	-32.527	47.508	1.00	47.54
24074	CG	PRO	D	740	-90.252	-32.109	48.972	1.00	48.06
24075	CD	PRO	D	740	-91.471	-31.223	48.974	1.00	46.94
24076	C	PRO	D	740	-91.607	-31.811	45.662	1.00	47.45
24077	O	PRO	D	740	-92.806	-31.592	45.868	1.00	47.85
24078	O7	NAG	D1621		-115.658	-10.108	1.065	1.00	73.42
24079	C7	NAG	D1621		-115.594	-9.096	0.380	1.00	72.75
24080	C8	NAG	D1621		-116.631	-8.018	0.445	1.00	73.32
24081	N2	NAG	D1621		-114.567	-8.812	-0.414	1.00	71.98
24082	C2	NAG	D1621		-113.456	-9.726	-0.607	1.00	71.93
24083	C1	NAG	D1621		-112.792	-10.113	0.713	1.00	70.01
24084	C3	NAG	D1621		-113.935	-10.979	-1.334	1.00	72.45
24085	O3	NAG	D1621		-114.520	-10.646	-2.610	1.00	71.12
24086	C4	NAG	D1621		-112.786	-11.977	-1.491	1.00	72.47
24087	O4	NAG	D1621		-113.351	-13.258	-1.775	1.00	72.94
24088	C5	NAG	D1621		-111.914	-12.131	-0.238	1.00	72.76
24089	O5	NAG	D1621		-111.628	-10.885	0.412	1.00	72.16
24090	C6	NAG	D1621		-110.598	-12.825	-0.601	1.00	73.05
24091	O6	NAG	D1621		-109.961	-13.377	0.560	1.00	72.80
24092	O7	NAG	D2311		-143.486	2.005	13.260	1.00	74.38
24093	C7	NAG	D2311		-142.386	1.558	12.963	1.00	73.58
24094	C8	NAG	D2311		-142.247	0.199	12.336	1.00	73.63
24095	N2	NAG	D2311		-141.263	2.274	13.096	1.00	71.98
24096	C2	NAG	D2311		-141.288	3.609	13.680	1.00	70.62
24097	C1	NAG	D2311		-140.106	3.832	14.614	1.00	67.00
24098	C3	NAG	D2311		-141.303	4.679	12.596	1.00	70.50
24099	O3	NAG	D2311		-142.506	4.535	11.840	1.00	71.38
24100	C4	NAG	D2311		-141.254	6.070	13.217	1.00	70.31
24101	O4	NAG	D2311		-141.099	7.052	12.181	1.00	70.47
24102	C5	NAG	D2311		-140.104	6.171	14.219	1.00	69.91
24103	O5	NAG	D2311		-140.196	5.133	15.192	1.00	69.16
24104	C6	NAG	D2311		-140.111	7.517	14.934	1.00	70.22
24105	O6	NAG	D2311		-141.207	7.570	15.854	1.00	70.09
24106	O7	NAG	D2411		-112.694	16.675	14.251	1.00	58.29
24107	C7	NAG	D2411		-111.936	16.037	13.545	1.00	58.41
24108	C8	NAG	D2411		-112.422	15.169	12.422	1.00	57.84
24109	N2	NAG	D2411		-110.619	16.110	13.681	1.00	58.33
24110	C2	NAG	D2411		-110.033	16.919	14.722	1.00	58.50
24111	C1	NAG	D2411		-109.372	16.035	15.770	1.00	55.27
24112	C3	NAG	D2411		-109.003	17.855	14.113	1.00	60.36
24113	O3	NAG	D2411		-109.616	18.724	13.147	1.00	61.58

FIGURE 3 RE

A	B	C	D	E	F	G	H	I	J
24114	C4	NAG	D2411		-108.359	18.664	15.225	1.00	61.57
24115	O4	NAG	D2411		-107.303	19.448	14.664	1.00	67.27
24116	C5	NAG	D2411		-107.807	17.736	16.309	1.00	60.81
24117	O5	NAG	D2411		-108.833	16.866	16.793	1.00	58.82
24118	C6	NAG	D2411		-107.256	18.518	17.490	1.00	60.30
24119	O6	NAG	D2411		-106.648	17.593	18.392	1.00	61.16
24120	O7	NAG	D2412		-102.963	19.045	15.946	1.00	79.63
24121	C7	NAG	D2412		-103.800	19.396	15.139	1.00	78.83
24122	C8	NAG	D2412		-103.934	18.788	13.771	1.00	79.00
24123	N2	NAG	D2412		-104.689	20.321	15.489	1.00	78.34
24124	C2	NAG	D2412		-105.721	20.814	14.606	1.00	78.56
24125	C1	NAG	D2412		-107.094	20.684	15.246	1.00	76.22
24126	C3	NAG	D2412		-105.386	22.271	14.309	1.00	79.46
24127	O3	NAG	D2412		-104.278	22.311	13.399	1.00	80.11
24128	C4	NAG	D2412		-106.553	23.048	13.709	1.00	79.88
24129	O4	NAG	D2412		-106.301	24.453	13.835	1.00	80.18
24130	C5	NAG	D2412		-107.870	22.718	14.397	1.00	79.65
24131	O5	NAG	D2412		-108.051	21.305	14.391	1.00	78.94
24132	C6	NAG	D2412		-109.038	23.397	13.689	1.00	79.99
24133	O6	NAG	D2412		-109.050	23.024	12.305	1.00	80.18
24134	O7	NAG	D2931		-121.810	14.605	-2.718	1.00	80.29
24135	C7	NAG	D2931		-121.748	13.389	-2.736	1.00	80.24
24136	C8	NAG	D2931		-122.652	12.560	-3.606	1.00	80.94
24137	N2	NAG	D2931		-120.825	12.713	-2.050	1.00	78.56
24138	C2	NAG	D2931		-119.878	13.395	-1.190	1.00	77.00
24139	C1	NAG	D2931		-119.943	12.829	0.230	1.00	74.54
24140	C3	NAG	D2931		-118.494	13.252	-1.814	1.00	77.06
24141	O3	NAG	D2931		-118.432	14.006	-3.035	1.00	77.42
24142	C4	NAG	D2931		-117.406	13.711	-0.852	1.00	76.73
24143	O4	NAG	D2931		-116.121	13.393	-1.397	1.00	76.18
24144	C5	NAG	D2931		-117.569	13.022	0.496	1.00	76.47
24145	O5	NAG	D2931		-118.861	13.321	1.025	1.00	76.20
24146	C6	NAG	D2931		-116.517	13.547	1.462	1.00	76.51
24147	O6	NAG	D2931		-116.850	14.893	1.819	1.00	76.40
24148	O7	NAG	D3331		-116.219	16.951	45.963	1.00	62.90
24149	C7	NAG	D3331		-116.733	17.154	44.869	1.00	62.34
24150	C8	NAG	D3331		-118.215	17.287	44.684	1.00	61.90
24151	N2	NAG	D3331		-115.991	17.361	43.789	1.00	61.79
24152	C2	NAG	D3331		-114.552	17.254	43.909	1.00	61.67
24153	C1	NAG	D3331		-113.957	16.496	42.730	1.00	57.43
24154	C3	NAG	D3331		-113.878	18.612	44.037	1.00	62.68
24155	O3	NAG	D3331		-114.391	19.283	45.188	1.00	63.18
24156	C4	NAG	D3331		-112.380	18.387	44.208	1.00	63.31
24157	O4	NAG	D3331		-111.696	19.642	44.179	1.00	64.30
24158	C5	NAG	D3331		-111.827	17.472	43.110	1.00	62.90
24159	O5	NAG	D3331		-112.580	16.260	43.023	1.00	62.27
24160	C6	NAG	D3331		-110.382	17.098	43.394	1.00	63.76
24161	O6	NAG	D3331		-110.097	15.863	42.731	1.00	65.10
24162	O	HOH	W	1	-70.047	-9.621	78.744	1.00	22.57
24163	O	HOH	W	2	-34.851	-4.814	99.378	1.00	19.43
24164	O	HOH	W	3	-62.319	-2.336	82.776	1.00	15.33

FIGURE 3 RF

A	B	C	D	E	F	G	H	I	J
24165	O	HOH	W	4	-105.925	-3.902	37.241	1.00	21.48
24166	O	HOH	W	5	-52.287	-3.318	87.258	1.00	18.54
24167	O	HOH	W	6	-91.285	-16.061	25.538	1.00	22.18
24168	O	HOH	W	7	-33.478	6.291	87.322	1.00	21.61
24169	O	HOH	W	8	-32.644	-5.923	92.690	1.00	16.83
24170	O	HOH	W	9	-83.500	-4.860	34.516	1.00	20.17
24171	O	HOH	W	10	-95.846	-3.672	26.390	1.00	22.63
24172	O	HOH	W	11	-38.585	-8.808	81.793	1.00	32.00
24173	O	HOH	W	12	-131.539	3.310	49.749	1.00	24.07
24174	O	HOH	W	13	-89.602	-6.431	24.528	1.00	31.49
24175	O	HOH	W	14	-22.191	19.290	81.198	1.00	29.71
24176	O	HOH	W	15	-103.695	-7.177	26.708	1.00	23.52
24177	O	HOH	W	16	-48.011	-6.164	76.557	1.00	19.02
24178	O	HOH	W	17	-61.410	-18.972	74.744	1.00	17.60
24179	O	HOH	W	18	-87.151	-5.568	66.326	1.00	30.46
24180	O	HOH	W	19	-44.226	22.424	76.402	1.00	28.91
24181	O	HOH	W	20	-83.027	-8.609	67.599	1.00	25.69
24182	O	HOH	W	21	-105.924	-19.170	40.951	1.00	25.71
24183	O	HOH	W	22	-79.666	-0.305	31.865	1.00	24.81
24184	O	HOH	W	23	-70.178	-9.767	91.982	1.00	15.50
24185	O	HOH	W	24	-120.299	1.315	46.762	1.00	32.88
24186	O	HOH	W	25	-126.417	-15.760	32.836	1.00	35.97
24187	O	HOH	W	26	-107.622	-9.077	46.909	1.00	19.86
24188	O	HOH	W	27	-88.087	-4.550	25.498	1.00	19.45
24189	O	HOH	W	28	-82.329	4.434	33.892	1.00	20.74
24190	O	HOH	W	29	-71.620	-24.011	85.413	1.00	25.43
24191	O	HOH	W	30	-46.730	-8.233	84.956	1.00	25.87
24192	O	HOH	W	31	-98.497	-11.196	73.755	1.00	26.51
24193	O	HOH	W	32	-87.168	-5.170	18.974	1.00	26.01
24194	O	HOH	W	33	-62.091	-12.323	84.142	1.00	23.87
24195	O	HOH	W	34	-50.927	-6.839	93.390	1.00	26.48
24196	O	HOH	W	35	-70.656	-3.379	73.593	1.00	20.18
24197	O	HOH	W	36	-84.552	-6.501	19.825	1.00	24.45
24198	O	HOH	W	37	-117.602	-11.619	43.383	1.00	29.61
24199	O	HOH	W	38	-109.448	-3.153	38.603	1.00	19.00
24200	O	HOH	W	39	-77.633	-16.012	77.912	1.00	18.39
24201	O	HOH	W	40	-37.628	-8.094	86.503	1.00	24.21
24202	O	HOH	W	41	-68.908	-6.239	89.490	1.00	30.06
24203	O	HOH	W	42	-93.574	-16.006	55.747	1.00	20.92
24204	O	HOH	W	43	-128.507	1.119	37.053	1.00	23.40
24205	O	HOH	W	44	-53.377	-22.267	85.437	1.00	24.95
24206	O	HOH	W	45	-27.348	7.987	74.856	1.00	33.09
24207	O	HOH	W	46	-33.504	8.245	79.353	1.00	22.40
24208	O	HOH	W	47	-63.275	-0.369	56.167	1.00	20.34
24209	O	HOH	W	48	-60.051	-20.691	77.439	1.00	29.91
24210	O	HOH	W	49	-103.083	-7.671	22.880	1.00	20.83
24211	O	HOH	W	50	-55.646	5.935	84.874	1.00	16.39
24212	O	HOH	W	51	-20.326	16.802	88.348	1.00	29.49
24213	O	HOH	W	52	-31.662	6.373	71.432	1.00	25.55
24214	O	HOH	W	53	-82.079	3.469	31.545	1.00	27.19
24215	O	HOH	W	54	-71.278	-25.643	91.236	1.00	30.95

**REPLACEMENT SHEET**  
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**FIGURE 3 RG**

A	B	C	D	E	F	G	H	I	J
24216	O	HOH	W	55	-113.642	1.100	40.912	1.00	20.06
24217	O	HOH	W	56	-106.400	-10.823	48.758	1.00	23.65
24218	O	HOH	W	57	-72.098	-27.755	94.347	1.00	21.93
24219	O	HOH	W	58	-81.485	-2.961	34.163	1.00	20.94
24220	O	HOH	W	59	-104.853	-11.330	41.012	1.00	22.49
24221	O	HOH	W	60	-50.143	-21.292	15.918	1.00	46.06
24222	O	HOH	W	61	-75.243	-14.549	84.035	1.00	22.74
24223	O	HOH	W	62	-42.523	-4.657	66.681	1.00	32.51
24224	O	HOH	W	63	-65.231	-15.648	33.609	1.00	31.65
24225	O	HOH	W	64	-108.948	-3.717	25.649	1.00	29.83
24226	O	HOH	W	65	-92.950	-6.028	69.562	1.00	30.87
24227	O	HOH	W	66	-86.814	5.040	47.700	1.00	39.21
24228	O	HOH	W	67	-116.041	-8.699	50.305	1.00	23.70
24229	O	HOH	W	68	-93.123	10.711	28.131	1.00	26.08
24230	O	HOH	W	69	-50.985	3.640	72.696	1.00	20.48
24231	O	HOH	W	70	-70.198	-10.686	80.787	1.00	27.69
24232	O	HOH	W	71	-114.830	-7.412	52.563	1.00	26.83
24233	O	HOH	W	72	-75.102	-0.276	9.886	1.00	28.92
24234	O	HOH	W	73	-23.734	-17.727	89.694	1.00	28.78
24235	O	HOH	W	74	-61.665	13.073	82.553	1.00	23.56
24236	O	HOH	W	75	-71.182	-9.402	3.784	1.00	35.36
24237	O	HOH	W	76	-24.540	-4.350	67.423	1.00	43.77
24238	O	HOH	W	77	-61.200	-3.647	93.365	1.00	19.38
24239	O	HOH	W	78	-121.220	15.557	20.341	1.00	39.85
24240	O	HOH	W	79	-72.505	5.898	75.027	1.00	28.20
24241	O	HOH	W	80	-53.615	-1.972	65.458	1.00	25.36
24242	O	HOH	W	81	-23.316	8.408	68.632	1.00	27.79
24243	O	HOH	W	82	-40.295	-8.810	86.500	1.00	19.14
24244	O	HOH	W	83	-66.594	-4.239	87.795	1.00	24.11
24245	O	HOH	W	84	-75.182	-13.009	69.585	1.00	18.25
24246	O	HOH	W	85	-96.392	-18.489	23.392	1.00	36.31
24247	O	HOH	W	86	-112.774	15.956	26.499	1.00	26.80
24248	O	HOH	W	87	-91.217	-10.713	67.871	1.00	16.07
24249	O	HOH	W	88	-12.985	-15.845	110.350	1.00	29.91
24250	O	HOH	W	89	-59.754	-17.919	67.217	1.00	33.41
24251	O	HOH	W	90	-87.120	-23.809	79.247	1.00	25.99
24252	O	HOH	W	91	-17.496	-5.037	62.417	1.00	35.92
24253	O	HOH	W	92	-82.662	-5.201	21.440	1.00	28.79
24254	O	HOH	W	93	-15.946	-17.219	90.181	1.00	35.57
24255	O	HOH	W	94	-106.041	-23.904	32.595	1.00	27.36
24256	O	HOH	W	95	-64.891	-38.163	13.838	1.00	49.31
24257	O	HOH	W	96	-68.673	-3.377	89.485	1.00	28.59
24258	O	HOH	W	97	-73.127	4.487	72.673	1.00	24.48
24259	O	HOH	W	98	-75.506	0.140	23.056	1.00	30.81
24260	O	HOH	W	99	-59.199	11.468	76.763	1.00	25.49
24261	O	HOH	W	100	-66.041	3.566	-5.385	1.00	33.28
24262	O	HOH	W	101	-11.881	3.367	91.642	1.00	21.04
24263	O	HOH	W	102	-85.203	-18.621	66.788	1.00	27.38
24264	O	HOH	W	103	-109.289	4.117	56.380	1.00	33.61
24265	O	HOH	W	104	-106.928	-5.336	50.716	1.00	28.54
24266	O	HOH	W	105	-81.989	-10.473	65.120	1.00	20.82



FIGURE 3 RH

A	B	C	D	E	F	G	H	I	J
24267	O	HOH	W	106	-41.840	13.381	94.446	1.00	35.97
24268	O	HOH	W	107	-106.501	-2.782	35.295	1.00	28.25
24269	O	HOH	W	108	-72.388	10.526	80.061	1.00	31.33
24270	O	HOH	W	109	-53.562	5.264	73.907	1.00	22.21
24271	O	HOH	W	110	-57.971	6.214	86.387	1.00	23.64
24272	O	HOH	W	111	-100.805	-7.622	22.042	1.00	23.65
24273	O	HOH	W	112	-48.478	-3.003	92.083	1.00	23.36
24274	O	HOH	W	113	-85.465	-25.300	72.872	1.00	29.44
24275	O	HOH	W	114	-20.282	8.882	79.786	1.00	35.92
24276	O	HOH	W	115	-45.959	2.886	103.777	1.00	26.29
24277	O	HOH	W	116	-36.141	-11.677	74.345	1.00	28.93
24278	O	HOH	W	117	-84.832	-6.458	67.180	1.00	23.67
24279	O	HOH	W	118	-110.885	-3.063	36.123	1.00	17.59
24280	O	HOH	W	119	-76.548	1.210	67.123	1.00	23.27
24281	O	HOH	W	120	-90.282	-6.048	52.777	1.00	21.84
24282	O	HOH	W	121	-29.693	4.046	86.322	1.00	34.98
24283	O	HOH	W	122	-28.902	-9.734	109.602	1.00	31.65
24284	O	HOH	W	123	-4.352	-3.743	90.634	1.00	32.59
24285	O	HOH	W	124	-91.781	-4.447	83.572	1.00	25.21
24286	O	HOH	W	125	-67.717	-16.914	28.754	1.00	40.36
24287	O	HOH	W	126	-119.211	0.651	53.546	1.00	26.42
24288	O	HOH	W	127	-91.301	-28.429	34.790	1.00	40.78
24289	O	HOH	W	128	-76.632	-4.861	41.174	1.00	30.89
24290	O	HOH	W	129	-99.483	0.770	31.171	1.00	21.46
24291	O	HOH	W	130	-40.577	25.458	71.322	1.00	31.89
24292	O	HOH	W	131	-54.460	-3.811	88.792	1.00	26.57
24293	O	HOH	W	132	-73.347	-26.780	96.594	1.00	25.31
24294	O	HOH	W	133	-101.846	-12.191	22.857	1.00	29.80
24295	O	HOH	W	134	-13.225	-4.460	115.839	1.00	40.97
24296	O	HOH	W	135	-68.912	-5.769	86.997	1.00	22.23
24297	O	HOH	W	136	-22.275	9.258	67.096	1.00	30.00
24298	O	HOH	W	137	-44.839	-3.193	88.802	1.00	24.93
24299	O	HOH	W	138	-65.755	-7.053	37.884	1.00	28.79
24300	O	HOH	W	139	-58.404	-6.772	87.209	1.00	23.49
24301	O	HOH	W	140	-80.628	-9.548	77.028	1.00	24.08
24302	O	HOH	W	141	-99.414	17.192	45.081	1.00	30.93
24303	O	HOH	W	142	-25.663	9.914	92.244	1.00	34.26
24304	O	HOH	W	143	-36.543	-4.504	86.323	1.00	26.15
24305	O	HOH	W	144	-50.670	-5.118	86.081	1.00	28.13
24306	O	HOH	W	145	-14.817	1.884	76.189	1.00	31.05
24307	O	HOH	W	146	-90.085	4.557	31.021	1.00	23.04
24308	O	HOH	W	147	-92.788	-23.311	32.998	1.00	35.23
24309	O	HOH	W	148	-73.899	-11.308	78.406	1.00	20.27
24310	O	HOH	W	149	-44.776	-13.606	80.500	1.00	26.73
24311	O	HOH	W	150	-82.733	-15.307	90.077	1.00	52.62
24312	O	HOH	W	151	-27.565	-1.561	63.745	1.00	37.01
24313	O	HOH	W	152	-59.931	-24.626	91.317	1.00	27.37
24314	O	HOH	W	153	-48.630	-13.831	69.969	1.00	25.35
24315	O	HOH	W	154	-56.434	-22.590	87.803	1.00	28.54
24316	O	HOH	W	155	-97.391	5.405	41.148	1.00	28.63
24317	O	HOH	W	156	-111.072	13.637	28.834	1.00	29.36

**REPLACEMENT SHEET**  
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**FIGURE 3 RI**

A	B	C	D	E	F	G	H	I	J
24318	O	HOH	W	157	-70.170	-26.212	93.886	1.00	21.97
24319	O	HOH	W	158	-40.421	-9.872	83.798	1.00	25.90
24320	O	HOH	W	159	-124.981	-6.802	54.015	1.00	32.00
24321	O	HOH	W	160	-14.089	3.959	80.977	1.00	28.94
24322	O	HOH	W	161	-75.785	-11.368	76.575	1.00	16.09
24323	O	HOH	W	162	-85.426	-18.016	6.302	1.00	35.99
24324	O	HOH	W	163	-79.395	2.382	31.405	1.00	35.95
24325	O	HOH	W	164	-80.145	2.786	36.094	1.00	28.98
24326	O	HOH	W	165	-54.849	-0.234	3.626	1.00	52.60
24327	O	HOH	W	166	-106.634	-5.311	26.057	1.00	27.44
24328	O	HOH	W	167	-62.637	0.167	91.371	1.00	24.04
24329	O	HOH	W	168	-72.863	22.007	67.554	1.00	38.64
24330	O	HOH	W	169	-114.985	13.055	45.357	1.00	40.11
24331	O	HOH	W	170	-71.027	-10.565	83.882	1.00	39.02
24332	O	HOH	W	171	-71.902	-4.399	21.029	1.00	31.18
24333	O	HOH	W	172	-48.422	1.924	102.299	1.00	32.51
24334	O	HOH	W	173	-48.339	-3.859	75.038	1.00	24.54
24335	O	HOH	W	174	-107.907	-2.609	32.422	1.00	22.99
24336	O	HOH	W	175	-104.620	-18.098	43.567	1.00	35.88
24337	O	HOH	W	176	-90.642	0.177	20.961	1.00	22.61
24338	O	HOH	W	177	-110.363	10.007	42.496	1.00	33.78
24339	O	HOH	W	178	-85.410	-18.015	73.273	1.00	17.91
24340	O	HOH	W	179	-57.482	7.441	93.816	1.00	23.43
24341	O	HOH	W	180	-35.275	-15.110	99.309	1.00	32.53
24342	O	HOH	W	181	-12.734	-3.318	78.965	1.00	34.77
24343	O	HOH	W	182	-118.291	5.612	43.221	1.00	24.78
24344	O	HOH	W	183	-58.998	-24.547	94.104	1.00	39.07
24345	O	HOH	W	184	-68.221	4.700	81.326	1.00	21.62
24346	O	HOH	W	185	-55.744	-25.024	77.689	1.00	38.78
24347	O	HOH	W	186	-51.734	-8.919	92.077	1.00	24.62
24348	O	HOH	W	187	-59.944	8.112	87.649	1.00	32.98
24349	O	HOH	W	188	-76.414	-19.148	58.805	1.00	46.32
24350	O	HOH	W	189	-50.989	14.314	75.971	1.00	34.01
24351	O	HOH	W	190	1.782	15.783	87.688	1.00	56.92
24352	O	HOH	W	191	-74.202	-3.438	22.570	1.00	29.82
24353	O	HOH	W	192	-32.236	1.525	89.838	1.00	25.96
24354	O	HOH	W	193	-75.647	0.161	28.354	1.00	29.82
24355	O	HOH	W	194	-92.262	-14.808	91.578	1.00	30.64
24356	O	HOH	W	195	-83.298	-11.345	4.255	1.00	38.28
24357	O	HOH	W	196	-37.338	3.161	59.048	1.00	20.67
24358	O	HOH	W	197	-59.182	-7.885	99.202	1.00	36.33
24359	O	HOH	W	198	-30.676	15.551	78.119	1.00	28.90
24360	O	HOH	W	199	-77.000	-8.976	77.246	1.00	30.29
24361	O	HOH	W	200	-62.592	-2.234	91.528	1.00	22.49
24362	O	HOH	W	201	-84.788	-15.542	74.412	1.00	22.56
24363	O	HOH	W	202	-75.385	-10.834	68.001	1.00	24.89
24364	O	HOH	W	203	-77.662	-8.241	26.170	1.00	21.16
24365	O	HOH	W	204	-64.771	1.570	90.052	1.00	33.62
24366	O	HOH	W	205	-81.699	-10.155	47.063	1.00	36.98
24367	O	HOH	W	206	-20.231	-36.910	75.605	1.00	36.29
24368	O	HOH	W	207	-25.961	-27.837	99.022	1.00	38.88

FIGURE 3 RJ

A	B	C	D	E	F	G	H	I	J
24369	O	HOH	W	208	-96.006	-14.048	18.095	1.00	28.04
24370	O	HOH	W	209	-58.469	5.269	93.487	1.00	23.13
24371	O	HOH	W	210	-74.325	-6.822	68.883	1.00	20.73
24372	O	HOH	W	211	-89.567	-12.790	68.569	1.00	25.44
24373	O	HOH	W	212	-37.674	0.666	58.639	1.00	25.90
24374	O	HOH	W	213	-68.643	-16.312	26.182	1.00	34.79
24375	O	HOH	W	214	-30.927	5.755	102.928	1.00	32.95
24376	O	HOH	W	215	-79.481	-1.250	35.367	1.00	26.75
24377	O	HOH	W	216	-92.377	-0.377	25.088	1.00	25.39
24378	O	HOH	W	217	-83.520	-15.613	70.403	1.00	24.33
24379	O	HOH	W	218	-72.696	-23.309	102.427	1.00	27.73
24380	O	HOH	W	219	-77.396	-4.105	-0.654	1.00	32.28
24381	O	HOH	W	220	-117.083	-11.246	50.304	1.00	31.59
24382	O	HOH	W	221	-97.187	-16.296	65.596	1.00	36.87
24383	O	HOH	W	222	-85.942	-11.587	45.311	1.00	26.63
24384	O	HOH	W	223	-41.219	-10.073	88.257	1.00	19.26
24385	O	HOH	W	224	-77.785	-29.179	76.237	1.00	27.76
24386	O	HOH	W	225	-55.141	-17.302	92.534	1.00	36.22
24387	O	HOH	W	226	-89.051	-3.976	58.563	1.00	31.85
24388	O	HOH	W	227	-133.159	5.245	4.407	1.00	35.71
24389	O	HOH	W	228	-64.438	-15.995	30.706	1.00	31.36
24390	O	HOH	W	229	-95.735	-25.318	29.954	1.00	34.97
24391	O	HOH	W	230	-73.488	-8.008	80.339	1.00	34.43
24392	O	HOH	W	231	-111.130	-3.552	40.809	1.00	23.31
24393	O	HOH	W	232	-110.233	-1.951	33.979	1.00	21.17
24394	O	HOH	W	233	-114.918	6.101	34.185	1.00	22.47
24395	O	HOH	W	234	-122.726	-5.394	51.238	1.00	26.82
24396	O	HOH	W	235	-122.574	-1.404	39.114	1.00	40.17
24397	O	HOH	W	236	-73.267	-25.867	81.292	1.00	29.46
24398	O	HOH	W	237	-84.409	-1.101	26.394	1.00	29.29
24399	O	HOH	W	238	-91.341	-16.988	84.578	1.00	25.96
24400	O	HOH	W	239	-39.470	-12.050	73.075	1.00	37.03
24401	O	HOH	W	240	-2.061	-8.117	106.954	1.00	34.50
24402	O	HOH	W	241	-59.827	-16.337	6.625	1.00	34.16
24403	O	HOH	W	242	-87.331	4.980	43.006	1.00	39.82
24404	O	HOH	W	243	-96.863	-28.277	33.742	1.00	44.85
24405	O	HOH	W	244	-104.593	-13.702	41.488	1.00	19.51
24406	O	HOH	W	245	-73.417	-11.509	83.254	1.00	26.05
24407	O	HOH	W	246	-75.722	2.349	69.359	1.00	29.25
24408	O	HOH	W	247	-24.578	1.538	70.024	1.00	39.78
24409	O	HOH	W	248	-46.998	-3.845	101.005	1.00	32.06
24410	O	HOH	W	249	-92.617	-13.851	9.018	1.00	42.28
24411	O	HOH	W	250	-61.764	-8.020	59.987	1.00	26.98
24412	O	HOH	W	251	-100.091	14.397	26.529	1.00	33.05
24413	O	HOH	W	252	-42.633	-6.822	68.502	1.00	24.40
24414	O	HOH	W	253	-7.181	8.932	64.612	1.00	53.64
24415	O	HOH	W	254	-27.720	14.073	82.527	1.00	30.70
24416	O	HOH	W	255	-24.177	14.802	60.014	1.00	34.48
24417	O	HOH	W	256	-119.569	-12.532	51.495	1.00	34.93
24418	O	HOH	W	257	-79.324	-19.664	11.988	1.00	34.52
24419	O	HOH	W	258	-23.137	8.077	85.725	1.00	30.90

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 RK**

A	B	C	D	E	F	G	H	I	J
24420	O	HOH	W	259	-112.359	-5.953	39.910	1.00	23.57
24421	O	HOH	W	260	-87.105	-12.094	63.902	1.00	34.92
24422	O	HOH	W	261	-62.976	1.555	93.915	1.00	36.04
24423	O	HOH	W	262	-53.812	-0.539	59.667	1.00	37.46
24424	O	HOH	W	263	-34.031	-2.761	87.089	1.00	29.06
24425	O	HOH	W	264	-6.705	-3.338	96.833	1.00	39.74
24426	O	HOH	W	265	-74.896	5.360	95.271	1.00	56.40
24427	O	HOH	W	266	-59.460	-24.880	84.398	1.00	40.62
24428	O	HOH	W	267	-76.631	-8.476	69.740	1.00	26.98
24429	O	HOH	W	268	-89.995	-1.453	18.972	1.00	30.42
24430	O	HOH	W	269	-32.602	-12.208	2.518	1.00	61.33
24431	O	HOH	W	270	-77.030	-19.598	85.298	1.00	19.19
24432	O	HOH	W	271	-41.014	-1.534	63.232	1.00	27.69
24433	O	HOH	W	272	-10.257	-6.964	64.268	1.00	45.43
24434	O	HOH	W	273	-100.633	14.121	46.413	1.00	22.88
24435	O	HOH	W	274	-90.144	6.000	42.386	1.00	26.82
24436	O	HOH	W	275	-43.139	-10.647	75.949	1.00	41.26
24437	O	HOH	W	276	-79.138	-27.021	101.715	1.00	38.78
24438	O	HOH	W	277	-90.782	-17.156	28.326	1.00	24.37
24439	O	HOH	W	278	-119.652	-0.976	45.322	1.00	29.90
24440	O	HOH	W	279	-56.269	-8.617	86.422	1.00	24.42
24441	O	HOH	W	280	-121.228	-17.863	25.690	1.00	42.06
24442	O	HOH	W	281	-83.963	-10.204	47.551	1.00	29.91
24443	O	HOH	W	282	-106.283	-7.787	25.072	1.00	19.72
24444	O	HOH	W	283	-26.442	5.106	111.640	1.00	26.93
24445	O	HOH	W	284	-30.160	-24.628	79.920	1.00	31.03
24446	O	HOH	W	285	-53.610	11.401	97.883	1.00	33.98
24447	O	HOH	W	286	-83.509	1.590	42.769	1.00	26.82
24448	O	HOH	W	287	-87.278	-6.046	78.528	1.00	52.68
24449	O	HOH	W	288	-72.847	5.572	-1.336	1.00	40.58
24450	O	HOH	W	289	-111.385	-17.904	9.313	1.00	42.55
24451	O	HOH	W	290	-41.612	-8.792	66.548	1.00	33.68
24452	O	HOH	W	291	-56.140	16.815	76.688	1.00	32.39
24453	O	HOH	W	292	-111.586	-16.824	12.088	1.00	37.33
24454	O	HOH	W	293	-63.913	-12.750	109.046	1.00	39.21
24455	O	HOH	W	294	-52.563	-15.484	82.996	1.00	24.79
24456	O	HOH	W	295	-74.928	-10.977	81.127	1.00	25.93
24457	O	HOH	W	296	-71.856	-3.869	0.862	1.00	39.40
24458	O	HOH	W	297	-92.388	7.474	22.287	1.00	36.88
24459	O	HOH	W	298	-113.255	-22.248	37.416	1.00	32.99
24460	O	HOH	W	299	-56.624	-21.871	66.601	1.00	62.21
24461	O	HOH	W	300	-69.526	-9.432	19.901	1.00	42.19
24462	O	HOH	W	301	-85.865	7.711	63.285	1.00	42.58
24463	O	HOH	W	302	-91.267	-14.271	84.352	1.00	26.57
24464	O	HOH	W	303	-95.271	15.524	82.843	1.00	40.52
24465	O	HOH	W	304	-109.080	-5.733	48.972	1.00	21.15
24466	O	HOH	W	305	-19.924	-6.058	62.090	1.00	33.77
24467	O	HOH	W	306	-131.353	-12.524	54.607	1.00	39.97
24468	O	HOH	W	307	-82.761	-15.268	82.570	1.00	22.77
24469	O	HOH	W	308	-120.711	-19.867	51.546	1.00	29.54
24470	O	HOH	W	309	-100.641	-16.744	72.476	1.00	36.27

FIGURE 3 RL

A	B	C	D	E	F	G	H	I	J
24471	O	HOH	W	310	-80.240	-17.209	39.758	1.00	33.90
24472	O	HOH	W	311	-31.708	-9.641	95.238	1.00	29.12
24473	O	HOH	W	312	-83.814	-16.154	5.680	1.00	53.05
24474	O	HOH	W	313	-37.232	-6.563	80.302	1.00	36.17
24475	O	HOH	W	314	-70.622	-1.977	88.167	1.00	27.88
24476	O	HOH	W	315	-84.119	-4.252	74.137	1.00	31.96
24477	O	HOH	W	316	-77.295	-10.541	81.836	1.00	32.42
24478	O	HOH	W	317	-101.238	-14.498	72.963	1.00	45.28
24479	O	HOH	W	318	-24.754	5.854	86.018	1.00	31.66
24480	O	HOH	W	319	-73.523	-10.444	44.877	1.00	29.80
24481	O	HOH	W	320	-59.557	13.895	78.345	1.00	26.20
24482	O	HOH	W	321	-109.292	-3.190	47.869	1.00	23.62
24483	O	HOH	W	322	-91.160	-8.045	54.116	1.00	23.32
24484	O	HOH	W	323	-25.913	8.917	82.854	1.00	29.76
24485	O	HOH	W	324	-45.682	-7.725	76.713	1.00	28.57
24486	O	HOH	W	325	-29.382	0.836	55.856	1.00	39.66
24487	O	HOH	W	326	-32.152	-26.155	78.159	1.00	37.39
24488	O	HOH	W	327	-114.146	5.928	52.894	1.00	33.72
24489	O	HOH	W	328	-78.027	-8.774	43.048	1.00	21.47
24490	O	HOH	W	329	-124.215	5.256	39.406	1.00	37.84
24491	O	HOH	W	330	-114.276	-0.923	34.147	1.00	29.79
24492	O	HOH	W	331	-86.349	-13.850	81.041	1.00	34.32
24493	O	HOH	W	332	-48.933	4.882	102.460	1.00	25.22
24494	O	HOH	W	333	-144.631	1.048	44.554	1.00	40.54
24495	O	HOH	W	334	-78.844	-2.914	102.492	1.00	34.39
24496	O	HOH	W	335	-82.073	-8.908	53.475	1.00	34.72
24497	O	HOH	W	336	-132.571	-12.045	51.216	1.00	43.39
24498	O	HOH	W	337	-113.484	15.595	18.318	1.00	43.50
24499	O	HOH	W	338	-80.286	5.452	15.760	1.00	42.84
24500	O	HOH	W	339	-94.063	4.582	23.976	1.00	23.62
24501	O	HOH	W	340	-123.795	9.308	48.657	1.00	34.25
24502	O	HOH	W	341	-8.269	-4.453	84.606	1.00	44.86
24503	O	HOH	W	342	-137.812	-28.700	21.377	1.00	49.37
24504	O	HOH	W	343	-70.782	-7.957	90.513	1.00	23.76
24505	O	HOH	W	344	-51.640	-3.177	62.800	1.00	28.14
24506	O	HOH	W	345	-107.294	19.998	28.517	1.00	34.16
24507	O	HOH	W	346	-75.391	-31.741	89.888	1.00	34.52
24508	O	HOH	W	347	-28.729	4.880	89.134	1.00	29.64
24509	O	HOH	W	348	-94.866	8.220	22.666	1.00	37.15
24510	O	HOH	W	349	-47.619	5.635	68.767	1.00	31.79
24511	O	HOH	W	350	-32.001	-5.017	90.310	1.00	28.26
24512	O	HOH	W	351	-117.983	-20.729	54.852	1.00	39.53
24513	O	HOH	W	352	-45.251	5.119	19.195	1.00	47.31
24514	O	HOH	W	353	-93.949	-1.603	27.037	1.00	28.43
24515	O	HOH	W	354	11.481	9.358	86.657	1.00	48.62
24516	O	HOH	W	355	-60.019	14.574	67.773	1.00	47.66
24517	O	HOH	W	356	-45.557	-15.018	78.497	1.00	25.05
24518	O	HOH	W	357	-76.943	-0.688	70.818	1.00	40.91
24519	O	HOH	W	358	-60.725	-1.346	55.724	1.00	44.13
24520	O	HOH	W	359	-90.931	-11.002	62.749	1.00	37.87
24521	O	HOH	W	360	-103.687	19.110	45.842	1.00	40.74

FIGURE 3 RM

A	B	C	D	E	F	G	H	I	J
24522	O	HOH	W	361	-103.447	1.555	58.425	1.00	44.32
24523	O	HOH	W	362	-62.424	-33.596	14.361	1.00	42.09
24524	O	HOH	W	363	-142.610	6.528	48.843	1.00	35.58
24525	O	HOH	W	364	-50.711	-7.054	8.397	1.00	49.26
24526	O	HOH	W	365	-32.087	-3.255	68.786	1.00	29.39
24527	O	HOH	W	366	-78.082	0.405	23.933	1.00	31.59
24528	O	HOH	W	367	-30.102	14.289	80.546	1.00	28.45
24529	O	HOH	W	368	-84.631	-31.154	102.920	1.00	45.04
24530	O	HOH	W	369	-73.753	-25.119	77.110	1.00	23.89
24531	O	HOH	W	370	-30.399	14.616	102.905	1.00	46.03
24532	O	HOH	W	371	-46.946	22.032	80.247	1.00	28.87
24533	O	HOH	W	372	-86.341	13.219	86.877	1.00	47.17
24534	O	HOH	W	373	-19.006	-2.210	116.881	1.00	33.56
24535	O	HOH	W	374	-76.017	-7.389	42.389	1.00	31.21
24536	O	HOH	W	375	-66.602	-6.591	17.190	1.00	38.69
24537	O	HOH	W	376	-88.752	-13.509	66.146	1.00	32.00
24538	O	HOH	W	377	-55.062	-14.282	90.703	1.00	26.99
24539	O	HOH	W	378	-78.048	-9.519	45.392	1.00	24.96
24540	O	HOH	W	379	-46.272	-14.689	60.543	1.00	46.39
24541	O	HOH	W	380	-104.895	17.465	31.690	1.00	52.28
24542	O	HOH	W	381	-90.097	-5.431	81.500	1.00	29.16
24543	O	HOH	W	382	-35.670	-1.759	75.500	1.00	33.60
24544	O	HOH	W	383	-27.003	8.111	68.489	1.00	29.54
24545	O	HOH	W	384	-115.888	-9.266	25.040	1.00	38.52
24546	O	HOH	W	385	-27.613	-1.659	68.433	1.00	34.39
24547	O	HOH	W	386	-71.527	-25.637	101.416	1.00	36.97
24548	O	HOH	W	387	-140.064	9.912	23.260	1.00	42.90
24549	O	HOH	W	388	-40.301	-8.785	104.462	1.00	40.87
24550	O	HOH	W	389	-64.273	1.125	23.882	1.00	39.29
24551	O	HOH	W	390	-92.220	-5.490	23.328	1.00	25.87
24552	O	HOH	W	391	-34.229	1.672	112.166	1.00	32.95
24553	O	HOH	W	392	-4.121	-6.162	88.781	1.00	46.28
24554	O	HOH	W	393	-55.972	-24.423	84.033	1.00	48.43
24555	O	HOH	W	394	-56.995	8.367	70.948	1.00	29.49
24556	O	HOH	W	395	-126.333	-7.814	37.963	1.00	37.37
24557	O	HOH	W	396	-48.948	3.852	66.990	1.00	37.01
24558	O	HOH	W	397	-46.749	-1.825	90.667	1.00	27.00
24559	O	HOH	W	398	-106.804	0.856	6.978	1.00	47.53
24560	O	HOH	W	399	-66.287	-18.360	33.203	1.00	36.53
24561	O	HOH	W	400	-61.116	-8.337	36.977	1.00	45.12
24562	O	HOH	W	401	-96.847	-20.236	62.448	1.00	49.72
24563	O	HOH	W	402	-27.539	-32.416	74.701	1.00	45.14
24564	O	HOH	W	403	-27.859	8.977	87.605	1.00	23.08
24565	O	HOH	W	404	-113.552	-6.130	38.217	1.00	34.04
24566	O	HOH	W	405	-41.959	22.786	70.496	1.00	27.28
24567	O	HOH	W	406	-43.248	24.044	98.232	1.00	47.89
24568	O	HOH	W	407	-98.090	3.948	48.778	1.00	36.98
24569	O	HOH	W	408	-117.722	-1.339	49.192	1.00	33.13
24570	O	HOH	W	409	-97.186	23.891	38.877	1.00	37.04
24571	O	HOH	W	410	-54.077	-21.256	87.483	1.00	31.67
24572	O	HOH	W	411	-26.540	-7.257	58.482	1.00	35.63

FIGURE 3 RN

A	B	C	D	E	F	G	H	I	J
24573	O	HOH	W	412	-59.189	15.902	76.884	1.00	28.37
24574	O	HOH	W	413	-106.052	-19.912	38.113	1.00	37.83
24575	O	HOH	W	414	-38.457	-5.391	64.442	1.00	36.51
24576	O	HOH	W	415	-81.281	-16.478	41.821	1.00	28.20
24577	O	HOH	W	416	-62.592	15.864	83.338	1.00	41.79
24578	O	HOH	W	417	-90.440	-7.959	81.659	1.00	33.84
24579	O	HOH	W	418	-109.276	-4.084	65.347	1.00	45.60
24580	O	HOH	W	419	-69.006	-12.524	47.891	1.00	34.51
24581	O	HOH	W	420	-61.674	13.685	79.885	1.00	22.82
24582	O	HOH	W	421	-77.977	6.047	70.046	1.00	24.17
24583	O	HOH	W	422	-79.914	-36.956	84.165	1.00	44.36
24584	O	HOH	W	423	-75.416	-3.338	43.412	1.00	28.37
24585	O	HOH	W	424	-18.933	12.928	89.742	1.00	25.94
24586	O	HOH	W	425	-94.178	3.382	47.428	1.00	36.17
24587	O	HOH	W	426	-52.330	5.800	71.979	1.00	21.85
24588	O	HOH	W	427	-88.551	-11.856	14.969	1.00	34.68
24589	O	HOH	W	428	-85.645	-17.986	37.895	1.00	33.59
24590	O	HOH	W	429	-132.669	-7.587	47.834	1.00	36.03
24591	O	HOH	W	430	-108.763	-1.321	24.408	1.00	28.53
24592	O	HOH	W	431	-88.217	-9.065	82.661	1.00	30.48
24593	O	HOH	W	432	-56.817	-21.493	13.134	1.00	42.34
24594	O	HOH	W	433	-85.022	5.402	37.016	1.00	28.68
24595	O	HOH	W	434	-73.814	-5.264	66.747	1.00	21.12
24596	O	HOH	W	435	-28.261	13.058	71.895	1.00	30.19
24597	O	HOH	W	436	-28.806	16.105	86.546	1.00	23.64
24598	O	HOH	W	437	-67.417	-16.186	93.767	1.00	23.93
24599	O	HOH	W	438	-48.439	-5.879	87.312	1.00	25.91
24600	O	HOH	W	439	-64.299	-28.634	72.041	1.00	33.74
24601	O	HOH	W	440	-51.532	-5.766	89.351	1.00	34.47
24602	O	HOH	W	441	-93.787	-8.401	22.095	1.00	32.88
24603	O	HOH	W	442	-71.406	3.880	14.002	1.00	33.45
24604	O	HOH	W	443	-98.429	-9.433	30.498	1.00	29.14
24605	O	HOH	W	444	-70.817	-10.368	96.315	1.00	27.94
24606	O	HOH	W	445	-97.517	13.369	26.783	1.00	33.43
24607	O	HOH	W	446	-89.969	-3.182	22.808	1.00	35.56
24608	O	HOH	W	447	-22.398	-7.403	112.204	1.00	36.75
24609	O	HOH	W	448	-54.199	-9.603	88.145	1.00	21.39
24610	O	HOH	W	449	-9.727	-30.093	71.057	1.00	39.70
24611	O	HOH	W	450	-33.216	5.161	88.968	1.00	31.92
24612	O	HOH	W	451	-71.338	7.377	0.357	1.00	56.63
24613	O	HOH	W	452	-65.276	-2.999	91.373	1.00	31.95
24614	O	HOH	W	453	-93.385	9.333	34.303	1.00	30.73
24615	O	HOH	W	454	-88.266	-21.163	92.334	1.00	34.41
24616	O	HOH	W	455	7.452	15.404	87.259	1.00	48.25
24617	O	HOH	W	456	-78.495	-10.661	40.980	1.00	29.54
24618	O	HOH	W	457	-29.277	-0.034	109.864	1.00	41.20
24619	O	HOH	W	458	-84.933	-22.922	78.703	1.00	29.22
24620	O	HOH	W	459	-67.783	-18.157	61.639	1.00	59.22
24621	O	HOH	W	460	-87.054	-3.611	13.871	1.00	35.20
24622	O	HOH	W	461	-106.268	3.822	20.597	1.00	40.04
24623	O	HOH	W	462	-14.798	-27.138	95.307	1.00	42.14

# FIGURE 3 RO

A	B	C	D	E	F	G	H	I	J
24624	O	HOH	W	463	-106.608	-0.853	14.325	1.00	44.75
24625	O	HOH	W	464	-12.037	19.585	82.638	1.00	34.50
24626	O	HOH	W	465	-9.799	0.222	61.269	1.00	37.92
24627	O	HOH	W	466	-20.392	5.445	93.033	1.00	25.96
24628	O	HOH	W	467	-109.907	10.806	33.777	1.00	42.21
24629	O	HOH	W	468	-72.446	-27.810	77.689	1.00	40.27
24630	O	HOH	W	469	-42.426	-12.230	79.608	1.00	32.72
24631	O	HOH	W	470	-71.414	0.070	15.776	1.00	39.43
24632	O	HOH	W	471	-9.422	11.591	79.064	1.00	45.89
24633	O	HOH	W	472	-99.297	-8.426	65.422	1.00	34.72
24634	O	HOH	W	473	-86.247	-3.322	24.107	1.00	27.75
24635	O	HOH	W	474	-33.420	7.924	76.871	1.00	35.27
24636	O	HOH	W	475	-84.558	-15.993	84.177	1.00	25.38
24637	O	HOH	W	476	-110.008	-7.611	47.215	1.00	32.50
24638	O	HOH	W	477	-87.610	-29.622	80.099	1.00	41.19
24639	O	HOH	W	478	-63.868	15.881	75.751	1.00	32.12
24640	O	HOH	W	479	-102.368	13.617	82.403	1.00	51.21
24641	O	HOH	W	480	-93.676	-8.304	53.421	1.00	22.95
24642	O	HOH	W	481	-65.038	-2.900	54.046	1.00	29.86
24643	O	HOH	W	482	-92.189	-12.262	66.212	1.00	33.84
24644	O	HOH	W	483	-34.202	-6.218	86.179	1.00	26.53
24645	O	HOH	W	484	-96.451	9.670	20.995	1.00	36.39
24646	O	HOH	W	485	-95.374	-17.291	106.485	1.00	52.48
24647	O	HOH	W	486	-73.322	-2.828	74.671	1.00	32.65
24648	O	HOH	W	487	-64.306	10.964	88.902	1.00	36.83
24649	O	HOH	W	488	-51.433	10.267	65.577	1.00	49.74
24650	O	HOH	W	489	-94.223	11.434	50.644	1.00	58.39
24651	O	HOH	W	490	-111.244	11.678	38.858	1.00	40.23
24652	O	HOH	W	491	-84.214	-35.551	92.737	1.00	32.32
24653	O	HOH	W	492	-51.608	-18.135	89.834	1.00	26.53
24654	O	HOH	W	493	-17.440	-25.419	66.465	1.00	49.15
24655	O	HOH	W	494	-39.111	10.312	9.299	1.00	46.57
24656	O	HOH	W	495	-41.021	-0.734	82.999	1.00	20.17
24657	O	HOH	W	496	-104.466	-16.137	89.994	1.00	29.53
24658	O	HOH	W	497	-36.737	-9.547	83.254	1.00	37.47
24659	O	HOH	W	498	-118.554	-7.113	14.480	1.00	47.45
24660	O	HOH	W	499	-70.907	-0.954	72.707	1.00	24.78
24661	O	HOH	W	500	-4.235	14.513	79.624	1.00	45.58
24662	O	HOH	W	501	-90.181	-15.231	97.552	1.00	44.18
24663	O	HOH	W	502	-76.085	-25.892	68.489	1.00	33.89
24664	O	HOH	W	503	-56.259	29.758	0.366	1.00	40.78
24665	O	HOH	W	504	-59.106	-24.485	86.538	1.00	34.68
24666	O	HOH	W	505	-131.342	-22.325	2.291	1.00	51.62
24667	O	HOH	W	506	-42.230	0.815	61.632	1.00	46.95
24668	O	HOH	W	507	-127.706	-12.085	47.862	1.00	37.48
24669	O	HOH	W	508	-114.497	13.233	17.975	1.00	37.97
24670	O	HOH	W	509	-66.706	-11.810	102.856	1.00	31.99
24671	O	HOH	W	510	-90.702	-5.881	10.694	1.00	36.99
24672	O	HOH	W	511	-62.647	-27.901	89.640	1.00	48.60
24673	O	HOH	W	512	-65.472	-1.994	94.134	1.00	32.99
24674	O	HOH	W	513	-112.605	-8.249	41.550	1.00	37.12



FIGURE 3 RP

A	B	C	D	E	F	G	H	I	J
24675	O	HOH	W	514	-73.619	-33.358	33.610	1.00	41.94
24676	O	HOH	W	515	-110.412	14.693	25.941	1.00	34.88
24677	O	HOH	W	516	-127.324	-18.406	28.670	1.00	37.34
24678	O	HOH	W	517	-92.072	11.787	30.309	1.00	38.67
24679	O	HOH	W	518	-109.533	13.252	42.283	1.00	43.87
24680	O	HOH	W	519	-96.204	-22.107	73.396	1.00	40.68
24681	O	HOH	W	520	-70.511	1.201	-1.688	1.00	43.61
24682	O	HOH	W	521	-85.422	2.630	44.519	1.00	32.34
24683	O	HOH	W	522	-89.796	-10.794	54.215	1.00	26.05
24684	O	HOH	W	523	-52.252	-9.767	-7.150	1.00	49.69
24685	O	HOH	W	524	-106.923	5.441	23.606	1.00	26.09
24686	O	HOH	W	525	-70.347	-0.883	1.599	1.00	33.59
24687	O	HOH	W	526	-13.852	2.537	82.735	1.00	25.71
24688	O	HOH	W	527	-69.051	-23.282	65.079	1.00	57.35
24689	O	HOH	W	528	-15.736	-24.504	64.200	1.00	55.61
24690	O	HOH	W	529	-83.151	-7.369	35.490	1.00	23.48
24691	O	HOH	W	530	-100.263	-10.055	21.332	1.00	29.03
24692	O	HOH	W	531	-84.428	-15.621	36.762	1.00	30.89
24693	O	HOH	W	532	-70.991	-7.964	81.724	1.00	39.87
24694	O	HOH	W	533	-29.394	7.216	88.291	1.00	30.48
24695	O	HOH	W	534	-90.281	11.278	38.196	1.00	37.25
24696	O	HOH	W	535	-94.916	-15.110	93.283	1.00	40.87
24697	O	HOH	W	536	-130.036	2.039	24.303	1.00	38.64
24698	O	HOH	W	537	-89.215	-0.334	55.254	1.00	42.59
24699	O	HOH	W	538	-35.758	-8.081	98.639	1.00	31.72
24700	O	HOH	W	539	-45.965	18.844	63.606	1.00	40.59
24701	O	HOH	W	540	-78.761	1.016	34.849	1.00	41.00
24702	O	HOH	W	541	-36.879	12.264	110.190	1.00	40.17
24703	O	HOH	W	542	-77.805	0.921	26.516	1.00	32.58
24704	O	HOH	W	543	-51.413	-5.972	-11.885	1.00	55.29
24705	O	HOH	W	544	-106.420	2.514	16.392	1.00	36.42
24706	O	HOH	W	545	-23.108	12.851	58.766	1.00	29.95
24707	O	HOH	W	546	-21.284	-34.324	68.964	1.00	34.79
24708	O	HOH	W	547	-115.873	-5.662	40.853	1.00	33.89
24709	O	HOH	W	548	-0.851	-16.521	99.863	1.00	49.84
24710	O	HOH	W	549	-125.713	-12.405	49.897	1.00	29.65
24711	O	HOH	W	550	-3.397	8.350	105.410	1.00	51.21
24712	O	HOH	W	551	-50.077	28.979	29.651	1.00	56.94
24713	O	HOH	W	552	-106.082	-6.054	28.376	1.00	35.22
24714	O	HOH	W	553	-28.271	8.354	109.470	1.00	41.13
24715	O	HOH	W	554	-58.943	16.159	74.242	1.00	37.16
24716	O	HOH	W	555	-110.483	11.853	49.320	1.00	38.28
24717	O	HOH	W	556	-18.014	-2.864	70.527	1.00	38.46
24718	O	HOH	W	557	-99.379	8.025	74.323	1.00	57.48
24719	O	HOH	W	558	-85.516	1.960	94.847	1.00	45.62
24720	O	HOH	W	559	-42.903	-15.679	81.707	1.00	33.93
24721	O	HOH	W	560	-32.359	-5.151	83.993	1.00	35.77
24722	O	HOH	W	561	-124.818	-32.042	29.691	1.00	41.61
24723	O	HOH	W	562	-90.150	-3.668	85.593	1.00	35.28
24724	O	HOH	W	563	-45.572	-2.969	63.207	1.00	35.77
24725	O	HOH	W	564	-96.431	13.752	89.323	1.00	42.58

FIGURE 3 RQ

A	B	C	D	E	F	G	H	I	J
24726	O	HOH	W	565	-11.676	-29.828	73.906	1.00	43.24
24727	O	HOH	W	566	-60.965	-6.210	58.917	1.00	34.35
24728	O	HOH	W	567	-96.938	-2.743	13.419	1.00	46.03
24729	O	HOH	W	568	-80.239	7.394	76.783	1.00	38.39
24730	O	HOH	W	569	-72.035	0.429	75.999	1.00	75.60
24731	O	HOH	W	570	-31.996	2.959	71.230	1.00	35.73
24732	O	HOH	W	571	-44.954	-18.106	77.973	1.00	50.86
24733	O	HOH	W	572	-74.601	-20.462	112.735	1.00	37.33
24734	O	HOH	W	573	-28.559	4.412	25.975	1.00	77.51
24735	O	HOH	W	574	-77.646	3.638	70.347	1.00	23.91
24736	O	HOH	W	575	-86.584	1.876	37.295	1.00	24.00
24737	O	HOH	W	576	-89.287	0.922	78.981	1.00	45.18
24738	O	HOH	W	577	-76.583	-27.839	98.387	1.00	30.42
24739	O	HOH	W	578	-25.542	4.659	45.516	1.00	51.05
24740	O	HOH	W	579	-48.522	-16.842	76.321	1.00	29.73
24741	O	HOH	W	580	-53.049	17.187	76.352	1.00	37.90
24742	O	HOH	W	581	-56.312	23.501	14.352	1.00	44.49
24743	O	HOH	W	582	-30.649	1.419	106.878	1.00	28.92
24744	O	HOH	W	583	-12.526	-25.497	64.032	1.00	52.61
24745	O	HOH	W	584	-28.109	-6.042	112.750	1.00	38.18
24746	O	HOH	W	585	-91.405	1.063	84.825	1.00	51.44
24747	O	HOH	W	586	-32.497	-0.763	55.223	1.00	48.90
24748	O	HOH	W	587	-58.966	-7.611	58.385	1.00	33.24
24749	O	HOH	W	588	-69.798	-31.805	89.201	1.00	36.09
24750	O	HOH	W	589	-56.322	-1.069	89.915	1.00	30.05
24751	O	HOH	W	590	-129.557	-26.903	49.312	1.00	50.67
24752	O	HOH	W	591	-20.910	-34.039	75.885	1.00	36.76
24753	O	HOH	W	592	6.899	4.829	91.810	1.00	41.51
24754	O	HOH	W	593	-29.936	-10.926	86.256	1.00	29.42
24755	O	HOH	W	594	-99.662	-26.933	76.105	1.00	40.22
24756	O	HOH	W	595	-110.859	-21.903	59.586	1.00	51.32
24757	O	HOH	W	596	-46.604	28.337	23.745	1.00	45.45
24758	O	HOH	W	597	-43.405	-9.922	78.639	1.00	28.65
24759	O	HOH	W	598	-110.346	-15.092	42.303	1.00	44.63
24760	O	HOH	W	599	-89.685	-7.210	85.731	1.00	41.15
24761	O	HOH	W	600	-89.542	-3.812	79.240	1.00	35.87
24762	O	HOH	W	601	-39.602	-12.554	95.565	1.00	61.57
24763	O	HOH	W	602	-51.722	6.270	32.500	1.00	43.89
24764	O	HOH	W	603	-126.789	19.632	20.809	1.00	50.98
24765	O	HOH	W	604	-106.338	20.953	20.414	1.00	55.07
24766	O	HOH	W	605	-127.649	-1.043	18.844	1.00	39.90
24767	O	HOH	W	606	-58.955	3.126	98.167	1.00	38.14
24768	O	HOH	W	607	-0.440	16.530	101.154	1.00	45.04
24769	O	HOH	W	608	-84.789	-35.574	95.888	1.00	42.44
24770	O	HOH	W	609	-79.558	9.193	79.177	1.00	42.96
24771	O	HOH	W	610	-146.635	-4.053	40.233	1.00	44.67
24772	O	HOH	W	611	-65.285	2.197	87.705	1.00	41.91
24773	O	HOH	W	612	-119.625	0.329	36.959	1.00	28.70
24774	O	HOH	W	613	-14.215	4.590	62.943	1.00	39.95
24775	O	HOH	W	614	-73.078	19.826	10.249	1.00	61.27
24776	O	HOH	W	615	-90.907	-28.279	41.301	1.00	53.05

FIGURE 3 RR

A	B	C	D	E	F	G	H	I	J
24777	O	HOH	W	616	-85.475	10.018	30.278	1.00	36.42
24778	O	HOH	W	617	-28.134	4.099	73.726	1.00	34.99
24779	O	HOH	W	618	-50.459	3.930	95.597	1.00	22.62
24780	O	HOH	W	619	-114.113	26.603	29.382	1.00	57.35
24781	O	HOH	W	620	-94.588	-6.059	71.538	1.00	32.20
24782	O	HOH	W	621	-82.752	13.037	62.201	1.00	30.48
24783	O	HOH	W	622	-20.926	-18.909	86.095	1.00	43.77
24784	O	HOH	W	623	-17.970	26.324	71.920	1.00	46.83
24785	O	HOH	W	624	-44.230	-14.175	75.931	1.00	44.88
24786	O	HOH	W	625	-52.806	-16.627	92.395	1.00	42.51
24787	O	HOH	W	626	-28.023	24.410	94.321	1.00	46.13
24788	O	HOH	W	627	-120.609	28.705	21.356	1.00	63.07
24789	O	HOH	W	628	-27.577	3.545	93.373	1.00	32.85
24790	O	HOH	W	629	-26.459	7.138	85.369	1.00	41.44
24791	O	HOH	W	630	0.858	-25.653	75.756	1.00	59.25
24792	O	HOH	W	631	-55.884	-21.067	81.597	1.00	37.94
24793	O	HOH	W	632	-38.896	29.659	75.935	1.00	36.05
24794	O	HOH	W	633	-84.032	-15.701	93.299	1.00	32.55
24795	O	HOH	W	634	-11.874	-8.228	80.656	1.00	35.54
24796	O	HOH	W	635	-75.434	-30.259	103.613	1.00	38.35
24797	O	HOH	W	636	-74.032	-33.431	88.035	1.00	34.09
24798	O	HOH	W	637	-33.404	-22.472	87.965	1.00	40.49
24799	O	HOH	W	638	-26.251	4.032	49.144	1.00	38.80
24800	O	HOH	W	639	-108.473	-41.961	44.645	1.00	66.35
24801	O	HOH	W	640	-53.820	27.469	30.231	1.00	37.74
24802	O	HOH	W	641	-87.240	-17.214	35.785	1.00	38.56
24803	O	HOH	W	642	-100.591	-21.427	22.177	1.00	31.00
24804	O	HOH	W	643	-87.956	-22.906	109.676	1.00	36.03
24805	O	HOH	W	644	-60.617	5.321	92.127	1.00	33.95
24806	O	HOH	W	645	-24.513	5.013	38.231	1.00	47.59
24807	O	HOH	W	646	-85.583	-14.622	9.202	1.00	53.67
24808	O	HOH	W	647	-46.151	23.506	78.086	1.00	36.42
24809	O	HOH	W	648	-15.981	-11.309	72.077	1.00	46.74
24810	O	HOH	W	649	-59.801	-4.749	52.778	1.00	43.98
24811	O	HOH	W	650	-87.978	-33.619	102.487	1.00	63.13
24812	O	HOH	W	651	-11.361	-7.818	97.878	1.00	37.51
24813	O	HOH	W	652	-103.706	-31.490	55.381	1.00	51.71
24814	O	HOH	W	653	-101.710	13.544	98.967	1.00	74.04
24815	O	HOH	W	654	-84.966	-38.282	96.823	1.00	41.06
24816	O	HOH	W	655	-78.472	-6.737	96.586	1.00	40.72
24817	O	HOH	W	656	-135.228	16.826	26.286	1.00	46.08
24818	O	HOH	W	657	-31.731	-0.414	108.386	1.00	30.69
24819	O	HOH	W	658	-103.774	-37.385	41.953	1.00	41.27
24820	O	HOH	W	659	-77.960	-28.996	100.030	1.00	30.02
24821	O	HOH	W	660	-27.317	8.162	38.469	1.00	49.74
24822	O	HOH	W	661	-93.111	-25.539	30.845	1.00	34.26
24823	O	HOH	W	662	-73.120	-23.584	94.120	1.00	31.89
24824	O	HOH	W	663	-19.345	2.573	76.802	1.00	47.99
24825	O	HOH	W	664	-13.696	-9.570	63.137	1.00	47.91
24826	O	HOH	W	665	-50.334	-10.047	-5.032	1.00	55.35
24827	O	HOH	W	666	-128.631	-29.688	43.934	1.00	42.09

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 RS**

A	B	C	D	E	F	G	H	I	J
24828	O	HOH	W	667	1.998	0.931	108.640	1.00	48.09
24829	O	HOH	W	668	-81.286	2.028	48.266	1.00	37.17
24830	O	HOH	W	669	-134.035	1.327	29.428	1.00	34.53
24831	O	HOH	W	670	-73.399	-1.276	-4.487	1.00	46.20
24832	O	HOH	W	671	-78.675	11.945	0.336	1.00	32.94
24833	O	HOH	W	672	-109.777	-18.384	39.041	1.00	40.69
24834	O	HOH	W	673	-84.206	-2.279	2.801	1.00	42.50
24835	O	HOH	W	674	0.084	2.944	107.715	1.00	57.24
24836	O	HOH	W	675	-13.542	-1.107	101.848	1.00	37.88
24837	O	HOH	W	676	-52.682	-4.437	23.976	1.00	42.73
24838	O	HOH	W	677	-43.449	-1.946	40.836	1.00	55.57
24839	O	HOH	W	678	-31.729	-25.134	88.262	1.00	42.24
24840	O	HOH	W	679	-112.636	6.306	54.952	1.00	43.73
24841	O	HOH	W	680	-81.712	-14.940	93.610	1.00	41.18
24842	O	HOH	W	681	-136.487	12.605	39.278	1.00	45.29
24843	O	HOH	W	682	-52.351	-17.893	71.059	1.00	34.40
24844	O	HOH	W	683	-139.268	2.638	26.004	1.00	45.18
24845	O	HOH	W	684	-51.980	-5.968	99.949	1.00	34.09
24846	O	HOH	W	685	-36.644	-14.622	121.379	1.00	39.41
24847	O	HOH	W	686	-66.136	-27.337	92.346	1.00	36.84
24848	O	HOH	W	687	-70.260	3.464	78.817	1.00	35.84
24849	O	HOH	W	688	-115.054	-14.780	38.963	1.00	51.42
24850	O	HOH	W	689	-67.762	9.167	89.828	1.00	41.06
24851	O	HOH	W	690	-76.205	-19.114	45.994	1.00	42.06
24852	O	HOH	W	691	-37.718	-20.124	103.859	1.00	39.08
24853	O	HOH	W	692	-87.393	11.388	31.561	1.00	31.42
24854	O	HOH	W	693	-84.992	17.386	67.200	1.00	39.64
24855	O	HOH	W	694	-8.499	9.237	107.160	1.00	47.35
24856	O	HOH	W	695	-30.407	7.050	79.655	1.00	39.41
24857	O	HOH	W	696	-66.142	18.511	-3.885	1.00	53.83
24858	O	HOH	W	697	-80.694	14.083	113.091	1.00	51.24
24859	O	HOH	W	698	-55.899	10.509	71.595	1.00	29.76
24860	O	HOH	W	699	-11.718	0.478	82.914	1.00	45.46
24861	O	HOH	W	700	-144.057	9.602	12.139	1.00	51.96
24862	O	HOH	W	701	-123.957	-8.933	61.691	1.00	48.53
24863	O	HOH	W	702	-109.921	-40.014	51.188	1.00	51.41
24864	O	HOH	W	703	-92.687	21.608	78.741	1.00	40.56
24865	O	HOH	W	704	-122.013	-5.018	53.612	1.00	38.40
24866	O	HOH	W	705	-101.530	-38.287	46.008	1.00	51.23
24867	O	HOH	W	706	-27.454	-12.186	5.720	1.00	51.47
24868	O	HOH	W	707	-104.938	-16.722	34.407	1.00	48.66
24869	O	HOH	W	708	-26.418	-14.256	81.064	1.00	46.60
24870	O	HOH	W	709	-75.934	-33.496	39.841	1.00	39.00
24871	O	HOH	W	710	-64.836	-17.007	63.963	1.00	43.38
24872	O	HOH	W	711	-95.062	-4.239	89.125	1.00	47.20
24873	O	HOH	W	712	-62.552	-12.299	31.956	1.00	45.49
24874	O	HOH	W	713	-57.917	-9.120	60.550	1.00	32.79
24875	O	HOH	W	714	1.093	-5.090	108.362	1.00	45.91
24876	O	HOH	W	715	-86.973	-15.905	64.055	1.00	22.71
24877	O	HOH	W	716	-15.870	6.898	59.992	1.00	42.80
24878	O	HOH	W	717	-6.846	16.966	94.233	1.00	42.44

FIGURE 3 RT

A	B	C	D	E	F	G	H	I	J
24879	O	HOH	W	718	-47.295	-3.374	97.326	1.00	34.39
24880	O	HOH	W	719	-18.800	-5.666	55.781	1.00	37.89
24881	O	HOH	W	720	-127.641	11.225	36.633	1.00	51.23
24882	O	HOH	W	721	-38.590	-16.155	110.676	1.00	51.60
24883	O	HOH	W	722	-39.858	-0.432	59.614	1.00	50.04
24884	O	HOH	W	723	-74.314	-15.994	44.707	1.00	55.03
24885	O	HOH	W	724	-9.960	11.652	74.565	1.00	34.71
24886	O	HOH	W	725	-107.173	-17.836	33.511	1.00	38.18
24887	O	HOH	W	726	-99.868	-20.443	112.442	1.00	57.29
24888	O	HOH	W	727	-106.173	-14.260	36.662	1.00	35.53
24889	O	HOH	W	728	-119.801	-15.962	37.710	1.00	45.13
24890	O	HOH	W	729	-61.611	18.551	65.794	1.00	50.39
24891	O	HOH	W	730	0.191	-19.913	75.954	1.00	63.30
24892	O	HOH	W	731	-94.042	-24.147	61.231	1.00	53.28
24893	O	HOH	W	732	-34.003	-4.912	88.410	1.00	42.19
24894	O	HOH	W	733	-77.079	15.127	76.919	1.00	37.67
24895	O	HOH	W	734	-25.059	-32.925	97.348	1.00	45.80
24896	O	HOH	W	735	-76.693	-30.862	101.322	1.00	45.34
24897	O	HOH	W	736	-18.491	5.856	86.005	1.00	40.76
24898	O	HOH	W	737	-108.341	2.644	7.825	1.00	62.16
24899	O	HOH	W	738	-109.993	0.738	91.620	1.00	48.60
24900	O	HOH	W	739	-121.856	1.010	35.985	1.00	27.42
24901	O	HOH	W	740	-92.668	-13.134	63.232	1.00	40.50
24902	O	HOH	W	741	-106.480	1.723	60.044	1.00	49.04
24903	O	HOH	W	742	-95.293	15.288	74.820	1.00	44.19
24904	O	HOH	W	743	-113.061	-15.331	19.125	1.00	51.17
24905	O	HOH	W	744	-22.958	-4.870	113.055	1.00	33.35
24906	O	HOH	W	745	-89.973	-2.565	11.396	1.00	42.40
24907	O	HOH	W	746	-79.987	1.872	22.457	1.00	23.89
24908	O	HOH	W	747	-110.181	-15.573	44.474	1.00	54.44
24909	O	HOH	W	748	-50.713	-20.930	74.519	1.00	52.49
24910	O	HOH	W	749	-73.658	-24.704	68.371	1.00	34.36
24911	O	HOH	W	750	-19.437	-24.855	65.220	1.00	42.91
24912	O	HOH	W	751	-91.197	3.357	89.107	1.00	39.95
24913	O	HOH	W	752	-118.127	-5.114	55.243	1.00	36.74
24914	O	HOH	W	753	-27.171	8.632	70.946	1.00	33.58
24915	O	HOH	W	754	-76.243	-31.139	41.991	1.00	40.07
24916	O	HOH	W	755	-39.397	8.095	56.388	1.00	56.79
24917	O	HOH	W	756	-104.200	-11.227	22.065	1.00	31.85
24918	O	HOH	W	757	-3.554	-9.778	111.146	1.00	32.29
24919	O	HOH	W	758	-74.006	1.863	72.442	1.00	30.98
24920	O	HOH	W	759	-54.405	33.925	16.062	1.00	47.19
24921	O	HOH	W	760	-31.003	12.521	32.845	1.00	60.68
24922	O	HOH	W	761	-78.699	2.560	97.572	1.00	46.62
24923	O	HOH	W	762	-105.963	-25.020	88.669	1.00	46.06
24924	O	HOH	W	763	-137.286	-10.278	49.944	1.00	48.34
24925	O	HOH	W	764	-54.755	10.426	94.112	1.00	25.91
24926	O	HOH	W	765	-18.367	21.230	89.592	1.00	43.75
24927	O	HOH	W	766	-74.917	-2.071	28.904	1.00	52.00
24928	O	HOH	W	767	-75.041	1.291	37.100	1.00	48.59
24929	O	HOH	W	768	-17.797	4.843	115.745	1.00	55.35

FIGURE 3 RU

A	B	C	D	E	F	G	H	I	J
24930	O	HOH	W	769	-97.728	13.775	22.123	1.00	47.55
24931	O	HOH	W	770	-50.927	-21.661	72.392	1.00	47.05
24932	O	HOH	W	771	-23.468	-5.973	60.726	1.00	38.19
24933	O	HOH	W	772	-123.433	0.675	33.643	1.00	45.22
24934	O	HOH	W	773	-134.913	-4.283	6.958	1.00	66.68
24935	O	HOH	W	774	-127.179	-32.498	40.865	1.00	43.85
24936	O	HOH	W	775	-17.092	16.175	76.945	1.00	45.34
24937	O	HOH	W	776	-56.377	21.256	87.338	1.00	43.00
24938	O	HOH	W	777	-24.439	-41.333	73.696	1.00	37.81
24939	O	HOH	W	778	-73.463	-30.933	86.327	1.00	33.66
24940	O	HOH	W	779	-70.281	-28.784	105.005	1.00	48.94
24941	O	HOH	W	780	-93.115	-0.754	94.056	1.00	38.17
24942	O	HOH	W	781	-31.661	5.608	75.797	1.00	36.73
24943	O	HOH	W	782	-63.429	12.258	19.239	1.00	53.46
24944	O	HOH	W	783	-97.261	18.287	79.139	1.00	43.88
24945	O	HOH	W	784	-71.802	2.252	35.264	1.00	40.62
24946	O	HOH	W	785	-32.081	5.748	112.046	1.00	35.75
24947	O	HOH	W	786	-139.810	-29.449	22.820	1.00	67.64
24948	O	HOH	W	787	-101.321	-18.153	113.123	1.00	44.05
24949	O	HOH	W	788	-40.760	-5.156	64.114	1.00	35.05
24950	O	HOH	W	789	-127.905	6.566	-6.359	1.00	76.46
24951	O	HOH	W	790	-59.533	-26.677	90.322	1.00	34.19
24952	O	HOH	W	791	-91.799	15.065	42.251	1.00	50.36
24953	O	HOH	W	792	-49.855	-0.090	102.999	1.00	40.48
24954	O	HOH	W	793	-52.079	-22.176	70.000	1.00	45.53
24955	O	HOH	W	794	-23.004	-8.624	61.058	1.00	39.84
24956	O	HOH	W	795	-112.487	0.818	34.335	1.00	26.14
24957	O	HOH	W	796	-140.190	-8.344	52.019	1.00	56.96
24958	O	HOH	W	797	-138.528	-21.185	40.068	1.00	40.97
24959	O	HOH	W	798	-49.656	-23.877	72.094	1.00	42.03
24960	O	HOH	W	799	-119.419	-3.074	56.028	1.00	32.43
24961	O	HOH	W	800	-32.508	4.018	77.065	1.00	45.49
24962	O	HOH	W	801	-21.869	-33.688	78.387	1.00	36.26
24963	O	HOH	W	802	-60.786	17.372	73.043	1.00	51.46
24964	O	HOH	W	803	-43.068	22.317	78.859	1.00	33.81
24965	O	HOH	W	804	-35.321	-9.622	96.413	1.00	44.83
24966	O	HOH	W	805	-87.823	-13.792	52.605	1.00	36.21
24967	O	HOH	W	806	-106.590	-15.054	38.915	1.00	45.67
24968	O	HOH	W	807	-75.239	4.136	14.225	1.00	39.44
24969	O	HOH	W	808	-18.177	13.978	67.515	1.00	58.12
24970	O	HOH	W	809	3.469	-3.273	99.678	1.00	51.02
24971	O	HOH	W	810	7.206	16.098	84.307	1.00	51.62
24972	O	HOH	W	811	-134.347	-10.174	26.411	1.00	53.44
24973	O	HOH	W	812	-45.444	8.802	-3.602	1.00	46.81
24974	O	HOH	W	813	-79.673	-23.515	67.461	1.00	41.63
24975	O	HOH	W	814	-45.083	23.312	87.433	1.00	52.94
24976	O	HOH	W	815	-129.550	-20.361	-0.338	1.00	57.31
24977	O	HOH	W	816	-7.865	0.634	71.449	1.00	33.31
24978	O	HOH	W	817	-92.944	4.828	65.491	1.00	70.96
24979	O	HOH	W	818	-108.298	15.720	25.185	1.00	31.68
24980	O	HOH	W	819	-87.642	-1.995	79.866	1.00	35.55

**REPLACEMENT SHEET**  
**10/659,055**

**FIGURE 3 RV**

A	B	C	D	E	F	G	H	I	J
24981	O	HOH	W	820	-53.129	-20.624	68.121	1.00	43.18
24982	O	HOH	W	821	-46.676	8.360	99.471	1.00	53.54
24983	O	HOH	W	822	-82.863	6.721	17.883	1.00	47.89
24984	O	HOH	W	823	-73.495	24.656	60.445	1.00	61.86
24985	O	HOH	W	824	-76.996	10.130	78.452	1.00	41.39
24986	O	HOH	W	825	-72.752	8.722	115.201	1.00	41.56
24987	O	HOH	W	826	-78.867	-18.768	51.533	1.00	39.31
24988	O	HOH	W	827	-64.933	-6.274	14.923	1.00	37.00
24989	O	HOH	W	828	-108.611	-11.029	92.203	1.00	69.08
24990	O	HOH	W	829	-60.555	-17.772	32.874	1.00	36.50
24991	O	HOH	W	830	-32.549	1.337	80.308	1.00	41.41
24992	O	HOH	W	831	-113.710	-25.902	32.716	1.00	49.83
24993	O	HOH	W	832	-73.968	-11.280	65.674	1.00	28.56
24994	O	HOH	W	833	-42.493	-11.248	66.170	1.00	40.32
24995	O	HOH	W	834	-96.113	-9.205	61.778	1.00	46.43
24996	O	HOH	W	835	-65.152	-23.619	25.368	1.00	34.26
24997	O	HOH	W	836	-39.194	-23.222	4.776	1.00	55.34
24998	O	HOH	W	837	-36.238	2.699	9.340	1.00	62.31
24999	O	HOH	W	838	-87.425	10.700	68.799	1.00	50.27
25000	O	HOH	W	839	-66.256	2.049	96.807	1.00	35.47
25001	O	HOH	W	840	-89.474	-22.916	65.158	1.00	45.39
25002	O	HOH	W	841	-27.948	6.269	81.342	1.00	43.67
25003	O	HOH	W	842	-67.887	18.469	72.523	1.00	31.79
25004	O	HOH	W	843	-120.465	7.696	45.684	1.00	38.52
25005	O	HOH	W	844	-71.060	-29.982	95.335	1.00	34.81
25006	O	HOH	W	845	-44.934	-9.421	59.671	1.00	50.92
25007	O	HOH	W	846	-136.026	-17.992	47.402	1.00	44.99
25008	O	HOH	W	847	-107.725	-11.728	40.368	1.00	34.40
25009	O	HOH	W	848	-83.287	2.905	48.594	1.00	47.83
25010	O	HOH	W	849	-95.896	-8.203	11.164	1.00	46.14
25011	O	HOH	W	850	-54.155	0.876	-7.757	1.00	53.90
25012	O	HOH	W	851	-9.851	-32.699	93.749	1.00	51.16
25013	O	HOH	W	852	-104.348	12.704	99.534	1.00	63.26
25014	O	HOH	W	853	-87.422	-4.549	113.517	1.00	48.99
25015	O	HOH	W	854	-2.158	-6.450	64.851	1.00	64.74
25016	O	HOH	W	855	-18.363	6.447	83.250	1.00	46.03
25017	O	HOH	W	856	-7.083	21.878	86.321	1.00	52.99
25018	O	HOH	W	857	-141.370	-13.344	38.226	1.00	47.02
25019	O	HOH	W	858	-18.676	23.769	88.306	1.00	36.60
25020	O	HOH	W	859	-3.232	-4.531	62.613	1.00	53.78
25021	O	HOH	W	860	-57.543	18.385	78.029	1.00	64.06
25022	O	HOH	W	861	-107.309	16.795	22.170	1.00	48.15
25023	O	HOH	W	862	-87.861	16.821	79.674	1.00	41.12
25024	O	HOH	W	863	-85.693	-7.204	77.392	1.00	33.57
25025	O	HOH	W	864	-62.946	10.907	53.948	1.00	46.59
25026	O	HOH	W	865	-36.828	-32.372	89.420	1.00	59.66
25027	O	HOH	W	866	-130.269	-31.081	42.575	1.00	58.44
25028	O	HOH	W	867	-84.428	-28.018	97.755	1.00	45.22
25029	O	HOH	W	868	-96.603	-15.449	95.970	1.00	50.05
25030	O	HOH	W	869	-84.309	-3.507	53.654	1.00	52.40
25031	O	HOH	W	870	-85.488	-9.485	79.996	1.00	34.93

FIGURE 3 RW

A	B	C	D	E	F	G	H	I	J
25032	O	HOH	W	871	-14.231	-18.199	83.212	1.00	65.94
25033	O	HOH	W	872	-41.548	6.888	12.114	1.00	57.29
25034	O	HOH	W	873	-86.723	-21.494	68.143	1.00	40.01
25035	O	HOH	W	874	-13.321	-0.552	86.509	1.00	46.17
25036	O	HOH	W	875	-102.575	21.776	36.735	1.00	35.79
25037	O	HOH	W	876	-21.013	12.921	96.471	1.00	41.55
25038	O	HOH	W	877	-54.981	-25.534	41.222	1.00	51.79
25039	O	HOH	W	878	-84.913	-24.984	68.610	1.00	38.41
25040	O	HOH	W	879	-11.882	-16.848	84.504	1.00	40.57
25041	O	HOH	W	880	-65.886	-14.938	26.150	1.00	39.74
25042	O	HOH	W	881	-43.445	-13.300	94.973	1.00	47.16
25043	O	HOH	W	882	-86.575	3.908	39.235	1.00	35.06
25044	O	HOH	W	883	-42.935	-14.460	101.664	1.00	46.33
25045	O	HOH	W	884	-102.862	4.225	59.670	1.00	63.42
25046	O	HOH	W	885	-37.621	27.775	64.018	1.00	42.56
25047	O	HOH	W	886	-123.005	4.627	56.211	1.00	44.90
25048	O	HOH	W	887	-44.650	-16.244	101.376	1.00	45.20
25049	O	HOH	W	888	-8.862	20.234	91.644	1.00	38.30
25050	O	HOH	W	889	-123.766	-17.360	38.390	1.00	46.84
25051	O	HOH	W	890	-103.157	-0.399	72.982	1.00	46.81
25052	O	HOH	W	891	-105.777	14.631	20.611	1.00	66.24
25053	O	HOH	W	892	-24.023	9.502	65.466	1.00	46.04
25054	O	HOH	W	893	-28.285	-3.488	113.000	1.00	45.11
25055	O	HOH	W	894	-25.898	2.662	91.394	1.00	37.86
25056	O	HOH	W	895	-76.562	-34.369	33.493	1.00	57.61
25057	O	HOH	W	896	-22.712	3.824	76.835	1.00	44.17
25058	O	HOH	W	897	-48.565	-19.330	89.549	1.00	35.12
25059	O	HOH	W	898	-63.475	-15.102	11.755	1.00	40.72
25060	O	HOH	W	899	-30.645	31.637	80.113	1.00	48.97
25061	O	HOH	W	900	-25.243	4.993	98.133	1.00	36.36
25062	O	HOH	W	901	-87.702	-35.472	100.703	1.00	48.87
25063	O	HOH	W	902	-93.587	-10.177	61.052	1.00	58.57
25064	O	HOH	W	903	-97.756	16.026	29.825	1.00	48.85
25065	O	HOH	W	904	-20.115	-3.404	74.768	1.00	44.90
25066	O	HOH	W	905	-15.016	18.829	99.081	1.00	58.91
25067	O	HOH	W	906	-91.419	-31.458	38.390	1.00	39.28
25068	O	HOH	W	907	-85.162	-30.223	38.252	1.00	60.78
25069	O	HOH	W	908	-31.527	17.665	31.472	1.00	60.01
25070	O	HOH	W	909	-77.299	-14.987	49.080	1.00	41.20
25071	O	HOH	W	910	-70.003	4.960	113.532	1.00	54.43
25072	O	HOH	W	911	-70.496	5.623	116.492	1.00	44.56
25073	O	HOH	W	912	-72.335	7.240	119.566	1.00	52.72
25074	O	HOH	W	913	-67.577	8.642	116.472	1.00	53.27
25075	O	HOH	W	914	-102.314	24.937	12.816	1.00	56.03
25076	O	HOH	W	915	-97.900	28.228	14.950	1.00	44.18
25077	O	HOH	W	916	-110.808	20.471	46.849	1.00	72.10



FIGURE 3 RX

A	B	C	D	E	F	G	H	I	J
25078	O	HOH	W	917	-38.511	-5.038	127.327	1.00	64.38
25079	O	HOH	W	918	-110.204	-15.447	-2.899	1.00	67.44
25080	O	HOH	W	919	7.037	-20.430	68.754	1.00	55.24
25081	O	HOH	W	920	-110.374	13.235	102.576	1.00	57.48
25082	O	HOH	W	921	-107.848	12.664	99.863	1.00	52.86
25083	O	HOH	W	922	-105.429	10.964	104.942	1.00	64.95
25084	O	HOH	W	923	-107.566	15.872	103.930	1.00	49.98